ADDENDUM

To the

15 February 2013
BOTANICAL BIOLOGICAL ASSESSMENT,
BOTANICAL BIOLOGICAL EVALUATION,
BOTANY REPORT and
NON-NATIVE SPECIES (WILDLIFE AND PLANT) RISK ASSESSMENT
Prepared for the
SOUTHERN CALIFORNIA NATIONAL FORESTS
LAND MANAGEMENT PLAN AMENDMENT
~DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT~

PREPARED FOR THE

SOUTHERN CALIFORNIA NATIONAL FORESTS
LAND MANAGEMENT PLAN AMENDMENT

~FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT~

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This addendum is referenced in the Final SEIS as:

U. S. Department of Agriculture. Forest Service. 2013b. Addendum to the Botanical Biological Assessment, Botanical Biological Evaluation, Botany Report, and Non-Native Species (Wildlife and Plant) Risk Assessment for Southern California National Forests Land Management Plan Amendment Draft Supplemental Environmental Impact Statement. Dated 11 September 2013. On file San Bernardino National Forest.

Summary

The purpose of this Addendum to the 15 February 2013 Botanical Evaluation, Botany Report and Non-native Species Risk Assessment is to document the potential effects as a result of changes to the alternatives since the Draft SEIS as well as changes and corrections to the February 2013 Botanical Reports.

Assessment of Threatened and Endangered Plant Species

- For the Final SEIS, the Biological Assessment (that addresses threatened and endangered species) was updated with new information and finalized as a stand-alone document.
- It includes the effects analysis and determinations for threatened and endangered species and their critical habitat.
- The document is titled "Botanical Biological Assessment for the Southern California National Forests Land Management Plan Amendment ~Final Supplemental Environmental Impact Statement dated 05 September 2013 (USDA Forest Service 2013c).
- The document is located on the public website for this project and can be accessed at http://www.fs.fed.us/nepa/nepa_project_exp.php?project=35130

Evaluation of Sensitive Plant Species

- For the Final SEIS, this Addendum to the 15 February 2013 Botanical Evaluation, Botany Report and Non-native Species Risk Assessment addresses changes from the Draft to the Final SEIS and includes some minor corrections to those reports.

Summary of Effects for Sensitive species from Alternatives 1, 2, 2a and 3

The details listed in this Amendment may result in some changes to species occurrences and acres displayed in the 15 February 2013 Biological Evaluation (BE) for individual IRAs, however the effects discussions in the BE are still applicable and accurate. The effects analysis for four species have been updated.

- The determination of effects remains the same for the alternatives addressed in the February 2013 Biological Evaluation.
- Overall, the effects would be beneficial for all but one of the sensitive plant species due to zoning of more restrictive LUZs.
- One additional species was found to occur in the IRAs and added for the Final SEIS. The effects determination for this species, S*ymphyotrichum defoliatum,* has been determined to have no impact and to be beneficial.
- For Alternative 2a (the new and "preferred" alternative), the effects are the same as those described in the BE under Alternative 2. There would be some differences in acreages and species known to be present. Nonetheless, the effects would be beneficial for the plants due to zoning of more restrictive LUZs. For Alternative 2a, my determination of effects are the same as those displayed for Alternative 2 in the BE. The effects determination for *Symphyotrichum defoliatum,* a species added for the Final SEIS has also been determined to have no impact and to be beneficial.

Determination of Effects for Sensitive Species known to occur within the IRAs

Table 1 provides a summary of the "determination of effects" for Region 5 Sensitive plant species known to occur with the IRAs for the FSEIS.

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area

Scientific Name	Occurrence Information	Determinations for Alternatives 2, 2a, and 3
Acanthoscyphus parishi var. *abramsii*	Sespe – Frazier (LPNF)	NI/BI
Allium howellii var. clokeyi	Sespe – Frazier (LPNF)	NI/BI
Arctostaphylos pilosula	Black Mountain (LPNF), Machesna Mountain (LPNF)	NI/BI
Arctostaphylos refugioensis	Tequepis (LPNF)	NI/BI
Arenaria lanuginosa ssp. saxosa	Raywood Flat B (SBNF)	NI/BI
Astragalus bicristatus	Cactus Springs B (SBNF)	NI/BI
Astragalus deanei	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River New, Upper San Diego River (CNF)	MAI
Astragalus oocarpus	Barker Valley, Eagle Peak (CNF)	NI/BI
Boechera johnstonii	Pyramid Peak A (SBNF)	NI/BI
Botrychium crenulatum	Raywood Flat B (SBNF)	NI/BI
Brodiaea orcuttii	Barker Valley, Sill Hill (CNF)	NI/BI
Calochortus clavatus ssp. *gracilis*	Fish Canyon (ANF), Red Mountain (ANF), Salt Creek (ANF), Sespe-Frazier (ANF), Tule (ANF)	NI/BI
Calochortus dunnii	Sill Hill (CNF)	NI/BI
Calochortus palmeri var. *munzii*	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Calochortus palmeri var. palmeri	Garcia Mountain (LPNF), Machesna Mountain (LPNF), Sespe – Frazier (LPNF)	NI/BI
Calochortus plummerae	Raywood Flat B (SBNF), West Fork (ANF), Westfork (ANF)	NI/BI
Calochortus simulans	Garcia Mountain (LPNF), Machesna Mountain (LPNF), Spoor Canyon (LPNF)	NI/BI
Calochortus weedii var. intermedius	Coldwater, Ladd (CNF)	NI/BI
Calochortus weedii var. vestus	Dry Lakes (LPNF), Sespe – Frazier (LPNF), Tequepis (LPNF), White Ledge (LPNF)	NI/BI
Calycadenia villosa	Black Mountain (LPNF)	NI/BI

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area		
Scientific Name	**Occurrence Information**	**Determinations for Alternatives 2, 2a, and 3**
Castilleja gleasonii	Fish Creek (ANF)	NI/BI
Castilleja lasiorhyncha	Raywood Flat B (SBNF)	NI/BI
Caulanthus simulans	Barker Valley (CNF),	NI/BI
Chorizanthe blakleyi	Fox Mountain (LPNF), Spoor Canyon (LPNF)	NI/BI
Chorizanthe parryi var. *parryi*	Coldwater (CNF)	NI/BI
Chorizanthe polygonoides var. *longispina*	Barker Valley (CNF)	NI/BI
Chorizanthe rectispina	Black Mountain (LPNF)	NI/BI
Clarkia delicata	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River New, Upper San Diego River (CNF)	NI/BI
Delphinium hesperium ssp. cuyamacae	Sill Hill (CNF)	NI/BI
Delphinium umbraulorum	Diablo (LPNF), Fox Mountain (LPNF), Garcia Mountain (LPNF), Machesna Mountain (LPNF), Sespe – Frazier (LPNF), Spoor Canyon (LPNF), Tequepis (LPNF), White Ledge (LPNF)	NI/BI
Dieteria canescens var. *ziegleri*	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Draba corrugata var. *saxosa*	Cactus Springs B (SBNF)	NI/BI
Dudleya viscida	Trabuco (CNF)	NI/BI
Eriastrum luteum	Black Mountain (LPNF)	NI/BI
Eriophyllum lanatum var. *hallii*	Fox Mountain (LPNF)	NI/BI
Fritillaria ojaiensis	Sespe – Frazier (LPNF), Tequepis (LPNF), White Ledge (LPNF)	NI/BI
Galium angustifolium ssp. *jacinticum*	Cactus Springs B (SBNF)	NI/BI
Gilia leptantha ssp. *leptantha*	Raywood Flat B (SBNF)	NI/BI
Hesperocyparis stephensonii	Sill Hill (CNF), Upper San Diego River (CNF)	NI/BI
Heuchera hirsutissima	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Heuchera parishi	Raywood Flat B (SBNF)	NI/BI
Horkelia cuneata ssp. *puberula*	Trabuco (CNF)	NI/BI
Horkelia truncata	Ladd (CNF)	NI/BI
Imperata brevifolia	Antimony (LPNF), Dry Lakes (LPNF), West Fork (ANF), Westfork (ANF)	NI/BI
Layia heterotricha	Antimony (LPNF), Fox Mountain (LPNF), Quatal (LPNF), Sespe – Frazier (LPNF)	NI/BI

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area		
Scientific Name	**Occurrence Information**	**Determinations for Alternatives 2, 2a, and 3**
Lepechinia cardiophylla	Coldwater (CNF), Ladd (CNF), Trabuco (CNF)	NI/BI
Lepechinia fragrans	West Fork (ANF), Westfork (ANF)	NI/BI
Lilium parryi	Cactus Springs B (SBNF), Cactus Springs B New (SBNF), Raywood Flat B (SBNF), West Fork (ANF),	NI/BI
Limnanthes alba var. *parishi*	Barker Valley (CNF)	NI/BI
Linanthus orcutti	Caliente (CNF)	NI/BI
Malacothrix saxatilis var. arachnoidea	Mudulce (LPNF)	NI/BI
Monardella linoides ssp. *oblonga*	Sespe – Frazier (LPNF)	NI/BI
Monardella macrantha ssp. *hallii*	Barker Valley (CNF), Caliente (CNF), Coldwater (CNF)	NI/BI
Monardella nana ssp.leptosiphon	Barker Valley (CNF)	NI/BI
Navarretia peninsularis	Sawmill – Badlands (LPNF), Sespe – Frazier (LPNF)	NI/BI
Nolina cistmontana	Trabuco (CNF)	NI/BI
Opuntia basiliaris ssp. *brachyclada*	Fish Canyon (ANF), Red Mountain (ANF), Sespe-Frazier (ANF), Tule (ANF)	NI/BI
Parnassia cirrata var. cirrata	Raywood Flat B (SBNF)	NI/BI
Penstemon californicus	Pyramid Peak A (SBNF)	NI/BI
Phacelia excilis	Sespe – Frazier (LPNF)	NI/BI
Phacelia keckii	Coldwater (CNF), Ladd (CNF), Trabuco (CNF)	NI/BI
Saltugilia latimeri	Cactus Springs B (SBNF)	NI/BI
Satureja chandleri	Trabuco (CNF)	NI/BI
Sedum niveum	Cactus Springs B (SBNF)	NI/BI
Sidalcea hickmanii ssp. parishi	Fox Mountain (LPNF), Machesna Mountain (LPNF), Spoor Canyon (LPNF), Raywood Flat B (SBNF)	NI/BI
Sidotheca emarginata	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Streptanthus bernardinus	Cucamonga B (SBNF)	NI/BI
Streptanthus campestris	White Ledge (LPNF), Cactus Springs B (SBNF)	NI/BI
Symphyotrichum defoliatum	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River new, Upper San Diego River (CNF)	NI/BI
Tetracoccus dioicus	Trabuco (CNF)	NI/BI

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area		
Scientific Name	**Occurrence Information**	**Determinations for Alternatives 2, 2a, and 3**
Thermoposis californica var. *semota*	Sill Hill (CNF), Upper San Diego River (CNF)	NI/BI
Thermopsis macrophylla	Tequepis (LPNF)	NI/BI

*Sensitive list includes those species managed as Sensitive prior to the June 30, 2013 Sensitive List

**Determination Codes:
MAI = may affect individuals but not likely to lead to a trend to Federal listing for Sensitive species.
NI/BI=No impact and potentially beneficial impact

Determination of Effects for Sensitive Species not known to occur within the IRAs
Sensitive species displayed in **Table 5** of this Addendum that are not known to occur within the IRAs are not affected by the proposed action. There are no effects to those species.

Viability Determination for all botanical species
None of the alternatives, including the No Action, would be expected to result in loss of viability across the range of any native plant species in any of the IRAs.

Determination of effects for Sensitive species, other rare species, General Botanical Resources and Non-Native Species Management from Alternatives A and B (Monitoring Alternatives)
Changing the monitoring methodology, in itself, is not expected to result in effects to botanical resources or non-native species management. No effects to these species would occur.

Risk assessment summary for the management of non-native plants and animals known to occur within the IRAs
The management of non-native plants and animals (e.g. survey, mapping, control and eradication) is not expected to be negatively affected by changes in land use zones. Alternatives 2 and 2a may result in lowered risk and Alternative 3 may result in the lowest risk of introduction, establishment and spread of non-native species.

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Addendum

The purpose of this Addendum to the 15 February 2013 Botanical Evaluation, Botany Report and Non-native Species Risk Assessment is to document the potential effects as a result of changes to the alternatives since the Draft SEIS as well as changes and corrections to the February 2013 Botanical Reports.

This Addendum created for the Final SEIS includes clarification regarding:

1. The Biological Assessment (threatened or endangered plant species)

The Botanical Biological Assessment addresses effects and provides determinations for Federally Threatened and Endangered plant species. For the Draft SEIS, effects to these species were addressed in the February 2013 combined document titled: Botanical Assessment, Botanical Evaluation, Botany Report and Non-Native Species (Wildlife and Plant) Risk Assessment for the Draft SEIS (USDA Forest Service 2013a).

For the Final SEIS, the Biological Assessment was updated with new information and finalized as a stand-alone document. It is titled "Botanical Biological Assessment for the Southern California National Forests Land Management Plan Amendment ~Final Supplemental Environmental Impact Statement dated 05 September 2013 (USDA Forest Service 2013c). The assessment is located on the public website for this project and can be accessed at http://www.fs.fed.us/nepa/nepa_project_exp.php?project=35130

2. The Biological Evaluation (Sensitive Plant Species)

A. Changes that occurred after the Draft SEIS was circulated in March 2013 that affect the Biological Evaluation (R5 Sensitive plant species), Botany Report and Non-native species (wildlife and plant) Risk Assessment

The addition of Alternative 2a the "preferred alternative" was one of the most important changes that occurred. This affected changes in land use zone acreages in Alternatives 2a and 3. The purpose and need for action along with descriptions and comparisons of all 4 alternatives from the Final SEIS is provided below.

Purpose and Need for Action
The purpose of the proposed action is to amend the LMP land use zone allocations for selected IRAs on the Angeles (ANF), Cleveland (CNF), Los Padres (LPNF), and San Bernardino National Forests (SBNF) and to amend the LMP monitoring and evaluation protocols. This action is needed to respond to the terms of the Settlement Agreement between the Forest Service, State of California, and other settlement parties. This proposed amendment to the 2006 LMPs is limited in scope and designed to address the terms of the settlement agreement.

Alternatives Considered in Detail

The Forest Service is proposing two independent and distinct actions for the proposed LMP amendment. The first component of the proposed amendment would change the land use zone (LUZ) allocations for select roadless areas on the four forests. In addition to the No Action alternative and the Proposed Action, the Forest Service identified two additional alternatives to consider in detail. One of the additional alternatives, Alternative 2a, the Preferred Alternative, was developed in response to comments on the Draft SEIS.

The second part of the proposed amendment would modify the monitoring and evaluation requirements adopted in the LMP. The monitoring and evaluation requirements for implementation of forest plans as required by 36 CFR 219.11(d) are typically designed around the forest plan goals, objectives, and standards in order to periodically determine and evaluate the effects of management practices. Forest Service policy does not require the analysis of alternative monitoring methods but monitoring alternatives are included in this SEIS as required by the Settlement Agreement. The Forest Service developed two monitoring alternatives for consideration in detail, in addition to the No Action alternative.

The LUZ and monitoring alternatives are separated to provide clarity in the analysis and disclosure of effects. The land use zone allocations apply to a select group of roadless areas, and will affect the uses of those specific lands. The analysis will focus on how the resources on those lands could change under the different land use zone allocations proposed by the alternatives.

The monitoring and evaluation protocols apply forest wide, not just to the set of IRAs being analyzed. They meet or exceed agency requirements for monitoring, and will influence the implementation of plan standards and guidelines within all resource areas. The analysis of the monitoring and evaluation protocols will focus on how the alternative strategies affect funding, staffing and economic efficiency.

Description of the Proposed Action and Alternatives

The proposed action is to modify the existing land use zones in the identified IRAs to include more Back Country Non-Motorized (BCNM) and Recommended Wilderness (RW) areas on the four National Forests.

It is important to note that any alternative that proposes additional areas as recommended wilderness should be considered a preliminary administrative recommendation as it relates to eventual wilderness designation. If an alternative that includes recommended wilderness is adopted, the preliminary administrative recommendation will receive further review and possible modification by the Chief of the Forest Service, Secretary of Agriculture, and the President of the United States. The Congress has reserved the authority to make final decisions on wilderness designation.

Table 2 displays the IRAs that are being evaluated under this proposed action.

Table 2. IRAs within the four southern California National Forests	
FOREST	**INVENTORIED ROADLESS AREAS**
Angeles	Fish Canyon, Red Mountain, Salt Creek, Tule, West Fork, Westfork
Cleveland	Barker Valley, Caliente, Cedar Creek*, Coldwater, Eagle Peak, Ladd, No Name, Sill Hill, Trabuco, Upper San Diego River Gorge*
Los Padres	Antimony, Black Mountain, Cuyama, Diablo, Dry Lakes, Fox Mountain, Garcia Mountain, Juncal, Machesna Mountain, Malduce Buckhorn, Quatal, Sawmill Badlands, Spoor Canyon, Tequepis, White Ledge
San Bernardino	Cactus Springs B, Cucamonga B, Cucamonga C, Pyramid Peak A, Raywood Flats B
Angeles and Los Padres	Sespe Frazier
*Cedar Creek and Upper San Diego River Gorge are areas the public proposed for wilderness designation and were analyzed for potential wilderness designation in the 2006 FEIS supporting the revised forest plans and will be considered and counted as IRAs in this analysis. **However, the Roadless Area Conservation Rule does not apply to these two areas.**	

For reference, **Table 3** displays the suitable uses for each LUZ type.

Overview maps of the IRAs are displayed below.

Maps indicating land use zoning by alternative are available on the public website for this project and can be accessed at http://www.fs.fed.us/nepa/nepa_project_exp.php?project=35130

Land Use Zone Allocations
Four potential actions are being considered: No Action (Alternative 1), the Proposed Action (Alternative 2), the Preferred Alternative (Alternative 2a), and an alternative that would maximize the designation of recommended wilderness areas (Alternative 3).

Alternative 1 - No Action

Under the No Action alternative, the current land use zones would be implemented for the four southern California national forests. The maps for the No Action alternative (in the Final SEIS Appendix 1 and available online) reflect the current LUZ allocations adopted as part of the LMP Alternative 4a.

Alternative 2 - The Proposed Action

The Proposed Action responds to the Settlement Agreement by re-zoning the majority of the land use zone allocations within the IRAs listed in the Settlement Agreement (Final SEIS Appendix 2)

to Back Country Non-Motorized (BCNM) and Recommended Wilderness (RW). The allocations are based on the wilderness evaluations for the IRAs that were updated concurrent with this analysis. Appendix 2 in the Final SEIS provides that updated analysis. Two of the areas in the Final SEIS Appendix 2 are undeveloped areas proposed by the public and evaluated for wilderness potential in the 2006 LMP revision but are not Inventoried Roadless Area per the Roadless Area Conservation Rule (RACR). Nevertheless, for the purpose of aiding readability of this environmental document, narrative or tables refer to these areas collectively as IRAs. The wilderness evaluations identify the capability, suitability, and need for wilderness associated with each IRA. Based on this updated analysis, the Proposed Action land use zones were developed using the following guidelines:

- Existing RW land use zones were maintained.
- Areas within the settlement IRAs that are capable and available for wilderness in areas of high need were allocated to RW. Capable and available areas adjacent to the settlement IRAs were also included in the RW allocation when inclusion created a more logical wilderness area boundary.
- Areas within the settlements IRAs that are capable and available for wilderness in areas of low or moderate need were allocated to BCNM.
- Areas within the settlements IRAs not capable or suitable for wilderness were allocated to other land use zones as follows:
    - Motorized access on existing authorized roads and trails was maintained, with 100 foot buffers applied on each side of county and forest roads, and 300 foot buffers applied on each side of state highways. The current forest plan LUZ allocation for these roaded areas will not change as part of this amendment and are a mix of Back Country (BC) or Back Country Motorized Use Restricted (BCMUR).
    - Existing Developed Area Interface (DAI) zones were maintained around structures/facilities to provide for fuel treatments. DAI zones in chaparral fuels were set a minimum distance of 300 feet from structures, with larger DAI zones in timbered areas.
    - Fuel breaks buffers were set at 300 feet if there was a National Forest System (NFS) road or motorized trail associated with the fuel break.
    - Facilities authorized under permit such as communication sites and powerlines not already in BCNM or RW were buffered to maintain the current allocations.
- Critical Biological (CB) zones were maintained or included in RW.

In response to scoping, the following incremental changes were incorporated into the proposed action:

- Several Forest Service trails in the proposed Salt Creek and Fish Canyon RW areas were removed from the proposed action to allow continued use by mountain bikes.
- The corridor along the Gold Hill road in the Sespe-Frazier IRA was widened to maintain suitable LUZ allocations for an Off-Highway Vehicle (OHV) trail parallel to the road.
- The Ribbonwood Equestrian camp ground in the Cactus Springs B IRA was removed from the proposed action to maintain the current LUZ.
- The following standard is proposed for the Los Padres LMP:
    - LPNF S2 – The Los Padres Condor Range and River Protection Act of 1992 states, "The Toad Springs road corridor delineated as potential wilderness shall remain open to off-road traffic until construction of an alternate route, which

bypasses this area, is completed. These potential wilderness lands shall be automatically incorporated in and managed as part of the Chumash Wilderness upon publication of a notice in the Federal Register." In furtherance of this act, the Forest Supervisor may approve an alternate route consistent with LMP standards with the following exception:

  - Off-highway vehicle use of forest system trails is considered suitable for BCMUR and BCNM land use zone allocations if the trail construction is conditioned on permanent closure of the Toad Springs trail.

- Projects currently under contract, permit, or other authorizing instrument (such as grazing permits and electronic sites) will not be affected by the decision; however, projects may be modified to adopt all or part of this direction where Forest Service managers deem appropriate. Re-issuance of existing authorizations will be treated as new decisions, which must be consistent with any new direction adopted as part of the amendment.

Several corrections were made to Alternative 2 in response to comments on the Draft SEIS. These include small adjustments in the LUZ boundaries to exclude a utility corridor in the West Fork IRA and a permitted ski area facility in the Cucamonga B IRA.

Alternative 2a - The Preferred Alternative

Alternative 2a includes the design criteria and features of Alternative 2, with the following modifications to the land use zones:

- The proposed BCNM land use zone was reduced slightly in the Black Mountain IRA to accommodate the Quail Trail relocation.
- The proposed RW land use zone for the Salt Creek and Fish Canyon IRAs was expanded to include two adjacent undeveloped areas along the abandoned "oil well" road, and the Sawtooth/Warm Springs Mountain Road.
- The proposed RW land use zone for Raywood Flat IRA was expanded to include the area around the South Fork of the Whitewater River while leaving a corridor of BCMUR along road 2S01.
- The proposed RW land use zone along the San Diego River undeveloped area was adjusted to provide a more manageable boundary.
- The proposed RW land use zone for the Cedar Creek undeveloped area was expanded to the east (up to the boundary of the Inaja Reservation). The land use zone allocation around the Cedar Creek Road was left as BC.
- The proposed RW land use zone adjacent to the Eagle Peak IRA was reduced slightly to accommodate future trail head development to the Three Sisters area.
- The land use zone for the King Creek Research Natural Area in the Sill Hill IRA was changed to RW.

These modifications are very focused and developed in response to comments on the Draft SEIS and to new information. All other aspects of Alternative 2a are the same as Alternative 2. The scope of Alternative 2a is within the scope of actions analyzed in the Draft SEIS.

Alternative 3 - Recommended Wilderness Emphasis

Alternative 3 was developed in response to comments from groups that wanted more recommended wilderness. Alternative 3 rezones the majority of the land use zones allocated within the IRAs to RW as shown on the maps in the Final SEIS Appendix 1. The same guidelines used to avoid conflicting uses in Alternative 2 apply to Alternative 3 with the

following exception:

- Forest Service non-motorized trails were not excluded from RW allocations in any area.

The following two areas were not allocated to RW for the reasons described:

- Portions of the Sespe-Frazier IRA were not included in the RW allocations due to the extensive road system within the IRA but rather were allocated to BCNM.
- The Ladd IRA was not allocated to RW because it is bisected by a major utility corridor. That same corridor bisects the Coldwater IRA, and the area north of the corridor was not allocated to RW because of its small size.

The additional RW allocations outside of but adjacent to IRA boundaries in Alternative 2a are incorporated into Alternative 3 for the Final SEIS. In addition, an undeveloped area adjacent to the Sespe-Frazier IRA was added to Alternative 3 in response to comments. An area around Wheeler Springs on the south end of the Dry Lakes IRA was left in the DAI land use zone to allow for a community protection area.

Connected Actions

The LMP classifies the Recreation Opportunity Spectrum (ROS) and Scenic Integrity Objectives (SIOs) for specific areas of the forests based on the allocation of land use zones. A decision to change the land use zone allocations as proposed in Alternatives 2, 2a, and 3 would trigger a change in the ROS and SIOs.

Monitoring and Evaluation Requirements

The secondary component of the proposal is to amend LMP monitoring and evaluation protocols. There are three alternatives, including not amending the current monitoring and evaluation requirements. The monitoring alternatives considered in this document are applicable across the entire National Forests of Southern CA, not just the IRAs included in this evaluation.

Alternative A - No Action

There would be no change to the current monitoring requirements under the No Action alternative. The current monitoring requirements are found in LMP Part 3, Appendix C.

Alternative B - The Proposed Action

The proposed action includes monitoring and evaluation requirements described in detail in the Final SEIS Appendix 3. The monitoring proposed action was incrementally changed after scoping to focus on the monitoring questions and indicators and less on the specific details of implementation. The proposed action monitoring and evaluation requirements are based on the current monitoring and evaluation requirements with the following revisions:

- Update Part 1 monitoring questions to:
    - Add a question for mortality risk.
    - Add a question for riparian condition
    - Drop the question for general forest activities.
    - Add an indicator for unauthorized roads and trails.
    - Clarify and update several indicators to reflect current inventory methodology.
- Add a section that describes the implementation of Part 1 monitoring in greater detail.

- Expand the description of Part 3 monitoring to provide more detail on how to select projects for monitoring.

Alternative C - Extensive Monitoring

Alternative C, described in detail in the Final SEIS Appendix 3, provides for more intensive inventories and surveys than the current monitoring plan or Alternative B. It is based in part on the concepts promoted by the conservation groups during scoping.

Alternative C follows the same general format as the Proposed Action Monitoring Alternative in that the monitoring requirements are associated with all three parts of the LMP. Alternative C would maintain the three part strategy with the following modifications. There would be more use of baseline inventories for Part 1 monitoring using a sampling approach. Under Alternative C, Part 1 focuses on monitoring effects of management relative to plan objectives, with indicators updated for current metrics. Part 2 reports accomplishment. Alternative C Part 3 would monitor more projects based on a 20% annual sample of new projects and a 20% sample of ongoing projects.

Agency Preferred Alternative

This Biological Assessment addresses all three action alternatives. LUZ Alternative 2a with Monitoring Alternative B have been identified as the preferred alternative(s).

Features Common to All Alternatives

Forest Plan direction

The proposed amendment does not change the forest wide management direction adopted in 2006. The existing LMP land use zone definitions, the suitable uses identified within the individual land use zones, and the plan standards remain as described in the current LMPs. Land use zone descriptions and suitable uses are found in Part 2 of the LMPs, forest specific plan standards are also in Part 2, and plan standards applicable to all four forests are found in Part 3.

Existing direction that will not change also includes the Regional Forester's decisions for recommended Wild and Scenic Rivers, Research Natural Areas, and Special Interest Areas. These decisions are outlined in the individual Record of Decision for each forest, and also described in Part 2 of the LMPs.

Implementation of the 2001 Roadless Area Conservation Rule

The proposed amendment will not affect the implementation of the 2001 Roadless Area Conservation Rule (36 CFR Part 294 Subpart B). The Roadless Area Conservation Rule (RACR) was published in the Federal Register on January 12, 2001 (66 FR 3244). Ten lawsuits were filed challenging the rule. In May 2001, a preliminary injunction barring implementation of the rule was issued by a federal district court in Idaho. The Ninth Circuit Court of Appeals reversed that ruling, and the RACR became effective in April 2003.

In July 2003, a federal district court in Wyoming upheld a State of Wyoming challenge to the RACR holding that promulgation of the RACR was procedurally flawed under the National Environmental Policy Act and substantively illegal under the Wilderness Act. The court permanently enjoined the rule. The decision was appealed to the Tenth Circuit Court of Appeals, but the court declared the case moot and vacated the Wyoming order after the 2005 State

Petitions Rule was promulgated.

The LMPs for the four forests were issued when the 2005 State Petitions Rule was in effect. Under the State Petitions Rule, the land use zone allocations made in the LMPs included designations that allowed road construction and reconstruction in approximately 28% of the one million acres of IRAs within the four forests.

The 2005 State Petitions Rule triggered two additional lawsuits in a district court of California. On September 20, 2006, the California court set aside the State Petitions Rule, and reinstated the RACR. The decision was appealed and on August 5, 2009, the appellate court affirmed the district court's ruling.

In response to the reinstatement of the RACR, the State of Wyoming filed a second lawsuit (*Wyoming II*) challenging the RACR. On August 12, 2008, the Wyoming court again set aside and enjoined the RACR. The Wyoming decision placed the Forest Service in a conundrum of trying to comply with the California court's order *to follow* the RACR and the Wyoming court's order *to not follow* the RACR. The government filed an appeal on August 13, 2009 to the Tenth Circuit Court.

On October 21, 2011, the 10th Circuit Court of Appeals reversed the Wyoming District Court and upheld USDA's 2001 Roadless Rule in Wyoming v. USDA. On March 2, 2012, Judge Brimmer (Wyoming) lifted his injunction on the 2001 Roadless Rule. Although Wyoming petitioned the Supreme Court for review, the petition for a writ of certiorari was denied by the Supreme Court on October 1, 2012.

Under the RACR, new road construction and reconstruction are generally prohibited in IRAs, and timber harvest is only permitted under a few limited exceptions. All LMP direction allowing road reconstruction and reconstruction in IRAs is superseded by the 2001 Roadless Rule without further agency action, and Forest Service project decisions will be guided by the LMP direction as modified by the RACR.

Table 3. Suitable Uses Within Land Use Zones and the Roadless Rule (RACR)

Activity or Use	Land Use Zone						IRA/RACR 36 CFR 294 Subpart B
	Developed Areas Interface (DAI)	Back Country (BC)	Back Country Motorized Use Restricted (BCMUR)	Back Country Non-Motorized (BCNM)	Critical Biological (CB)	Recommended Wilderness/ Wilderness (RW/W)	
Resource Management							
Rangeland Type Conversion for Forage production	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Restoration of Vegetation Condition	Suitable	Suitable	Suitable	Suitable	*By Exception	Suitable	Suitable if activity meets prohibitions[1]
Disposal of National Forest System lands	*By Exception	*By Exception	*By Exception	*By Exception	*By Exception	Not Suitable	Suitable
Public Use and Enjoyment							
Recreation Residence Tracts	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Organization Camps	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Lodges, Resorts and Clubs	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Hunting and Fishing	Regulated by the State (CDFG)	Regulated by the State (CDFG)	Regulated by the State (CDFG)	Regulated by the State (CDFG)	Regulated by the State (CDFG)	Regulated by the State (CDFG)	Regulated by the State (CDFG)
Target Shooting Areas	*By Exception	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Public Motorized Use on Forest System Roads	Suitable	Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable[2]
Authorized Motorized Use	Suitable	Suitable	Suitable	*By Exception	*By Exception	*By Exception	Suitable
Off-Highway Vehicle Use on Forest System Roads and Trails	Designated Roads and Trails	Designated Roads and Trails	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable[2]
Public Motorized Use off Forest System	Suitable in Designated	Suitable in Designated	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable[2]

Table 3. Suitable Uses Within Land Use Zones and the Roadless Rule (RACR)							
Activity or Use	**Land Use Zone**						**IRA/RACR 36 CFR 294 Subpart B**
	Developed Areas Interface (DAI)	**Back Country (BC)**	**Back Country Motorized Use Restricted (BCMUR)**	**Back Country Non-Motorized (BCNM)**	**Critical Biological (CB)**	**Recommended Wilderness/ Wilderness (RW/W)**	
Roads and Trails	Open Areas	Open Areas					
Mountain Bikes Forest System Roads and Trails	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Unless Otherwise Restricted	Not Suitable	Suitable[2]
Dispersed Area Camping	Suitable Unless Otherwise Restricted	Suitable Unless Otherwise Restricted	Suitable Unless Otherwise Restricted	Suitable Unless Otherwise Restricted	Not Suitable	Suitable Unless Otherwise Restricted	Suitable[3]
Commodity and Commercial Uses							
(Non-Rec) Special Uses: Low Intensity Land Use	Suitable	Suitable	Suitable	*By Exception	*By Exception	*By Exception	Suitable if activity meets prohibitions[1]
Communication Sites	Designated Areas	Designated Areas	Designated Areas	*By Exception	*By Exception	Not Suitable	Suitable if activity meets prohibitions[1]
Livestock Grazing	Designated Areas	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Designated Areas	Suitable
Major Transportation Corridors	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not suitable
Major Utility Corridors	Designated Areas	Designated Areas	Designated Areas	Not Suitable	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Road construction or re-construction	Suitable	Suitable	Suitable for authorized use	Not Suitable	Not Suitable	Not Suitable	By Exception[4]
Developed Facilities	Suitable	Suitable	*By Exception	Not Suitable	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Oil and Gas Exploration and Development Areas	Suitable	Suitable	*By Exception	*By Exception	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Minerals Resources Exploration and Development	Suitable	Suitable	*By Exception	*By Exception	*By Exception	Not Suitable	Suitable if activity meets prohibitions[1]

Table 3. Suitable Uses Within Land Use Zones and the Roadless Rule (RACR)

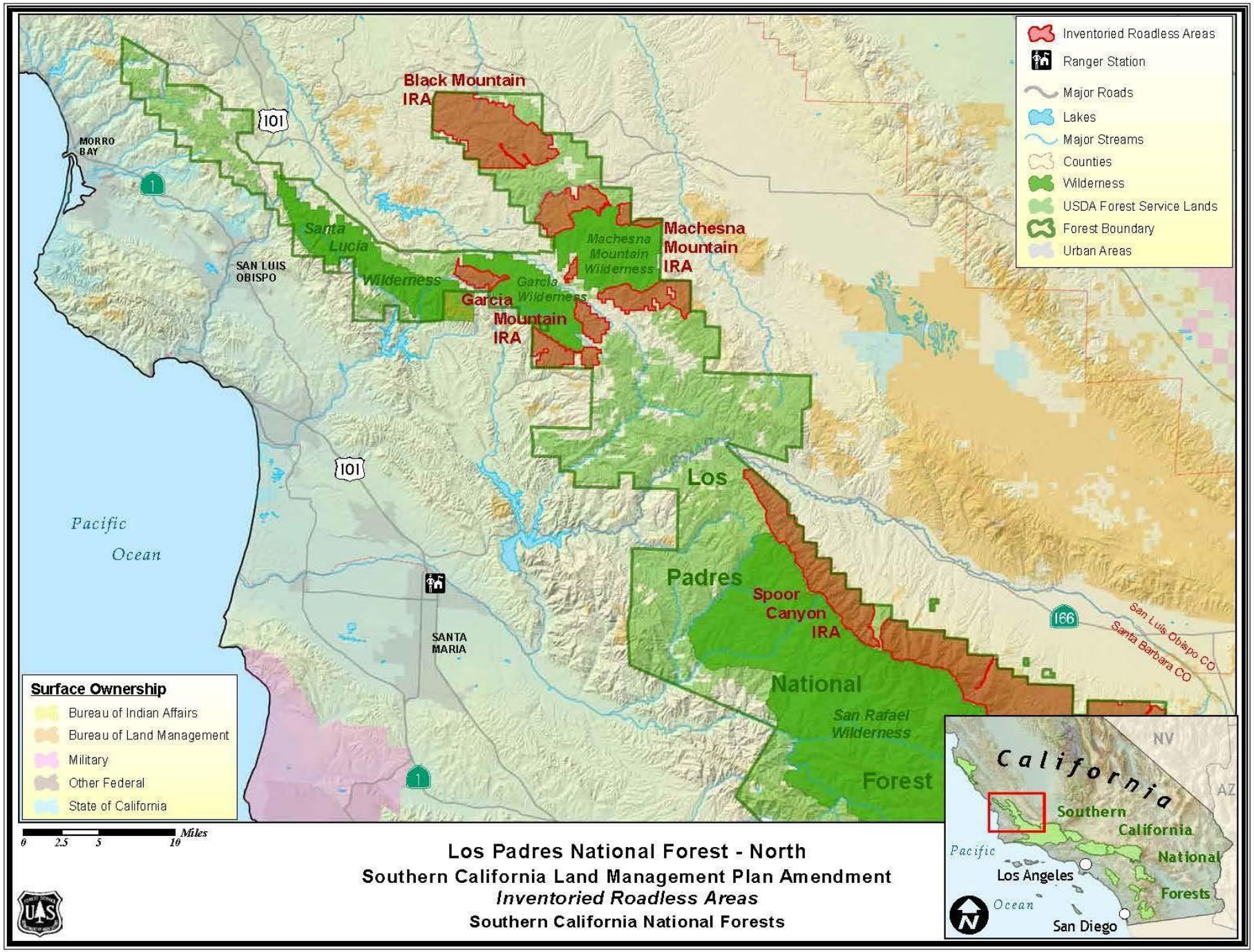
Activity or Use	Land Use Zone						IRA/RACR 36 CFR 294 Subpart B
	Developed Areas Interface (DAI)	Back Country (BC)	Back Country Motorized Use Restricted (BCMUR)	Back Country Non-Motorized (BCNM)	Critical Biological (CB)	Recommended Wilderness/ Wilderness (RW/W)	
Renewable Energy Resources	Suitable	Suitable	*By Exception	*By Exception	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]
Wood Products, including fuelwood harvesting	Suitable	Suitable	Suitable	Suitable	*By Exception	Not Suitable	By Exception
Special Forest Products	Suitable	Suitable	Suitable	Suitable	*By Exception	*By Exception	Suitable
Fire and Fuels Management							
Community Protection Areas	Suitable	Suitable	Suitable	Suitable	*By Exception	*By Exception	Suitable if activity meets prohibitions[1]
Fuelbreak Construction including type conversion	Suitable	Suitable	Suitable	*By Exception	*By Exception	*By Exception	Suitable if activity meets prohibitions[1]
Wildland Fire Use Strategy	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Suitable if activity meets prohibitions[1]

* By Exception = Conditions which are not generally compatible with the land use zone but may be appropriate under certain circumstances.

[1] Suitable if the activity is currently authorized, or can be conducted using existing classified roads or trails. Timber cutting is allowed incidental to the activity (294.13((b) (2)).

[2] Subject to travel management restrictions 36 CFR 212 and 36 CFR 261

[3] Subject to forest closures 36 CFR 261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Major Roads
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Santa Lucia Wilderness
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Los Padres National Forest
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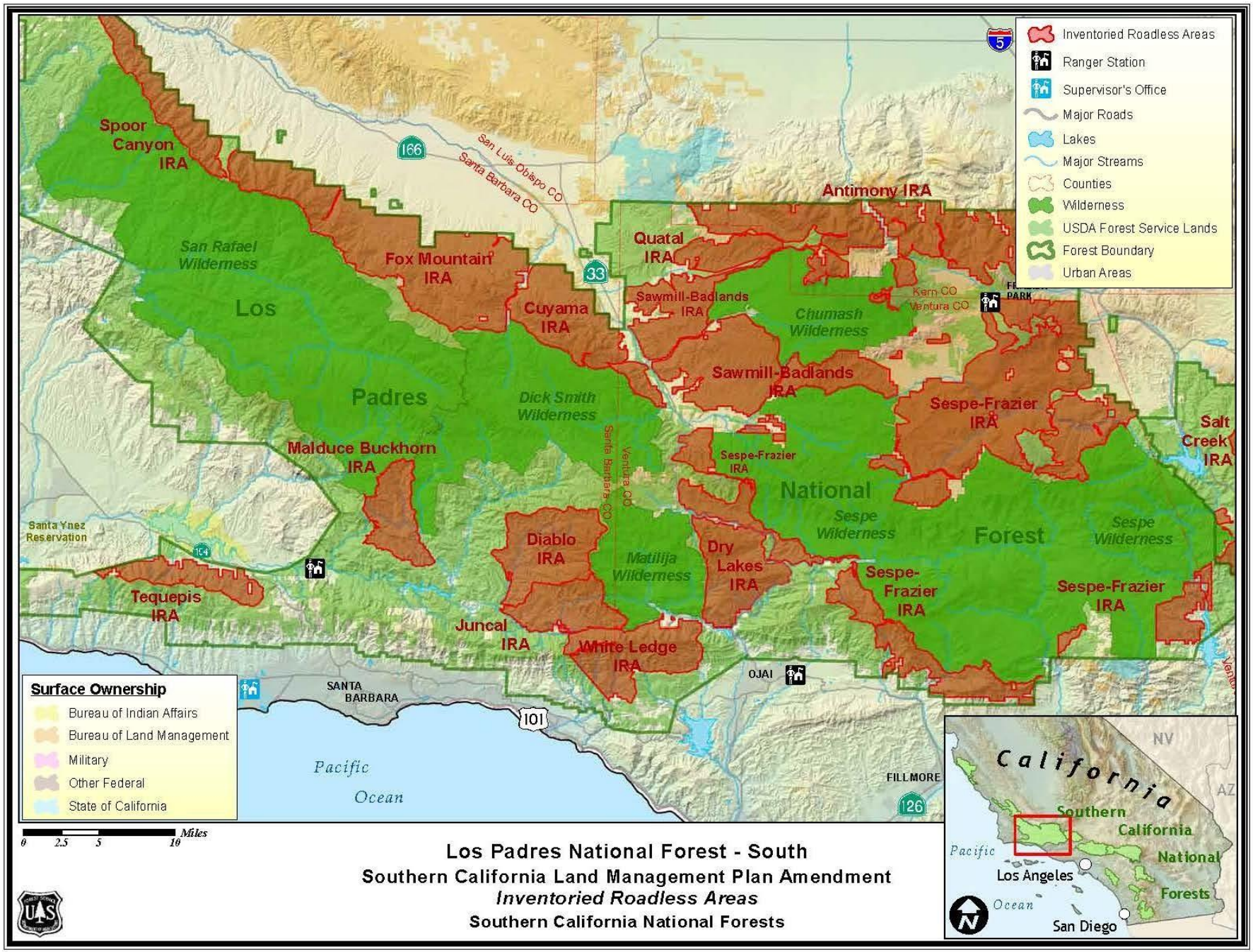
Pacific Ocean
Los Angeles
San Diego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Major Roads
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Wilderness
USDA Forest Service Lands
Forest Boundary
Urban Areas
Spoor Canyon IRA
San Rafael Wilderness
Fox Mountain IRA
Cuyama IRA
Antimony IRA
Quatal IRA
Sawmill-Badlands IRA
Chumash Wilderness
Kern CO
Ventura CO
Los Padres
Dick Smith Wilderness
Malduce Buckhorn IRA
Sespe-Frazier IRA
Salt Creek IRA
National Forest
Sespe Wilderness
Santa Ynez Reservation
Diablo IRA
Matilija Wilderness
Dry Lakes IRA
Tequepis IRA
Juncal IRA
White Ledge IRA
SANTA BARBARA
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FILLMORE
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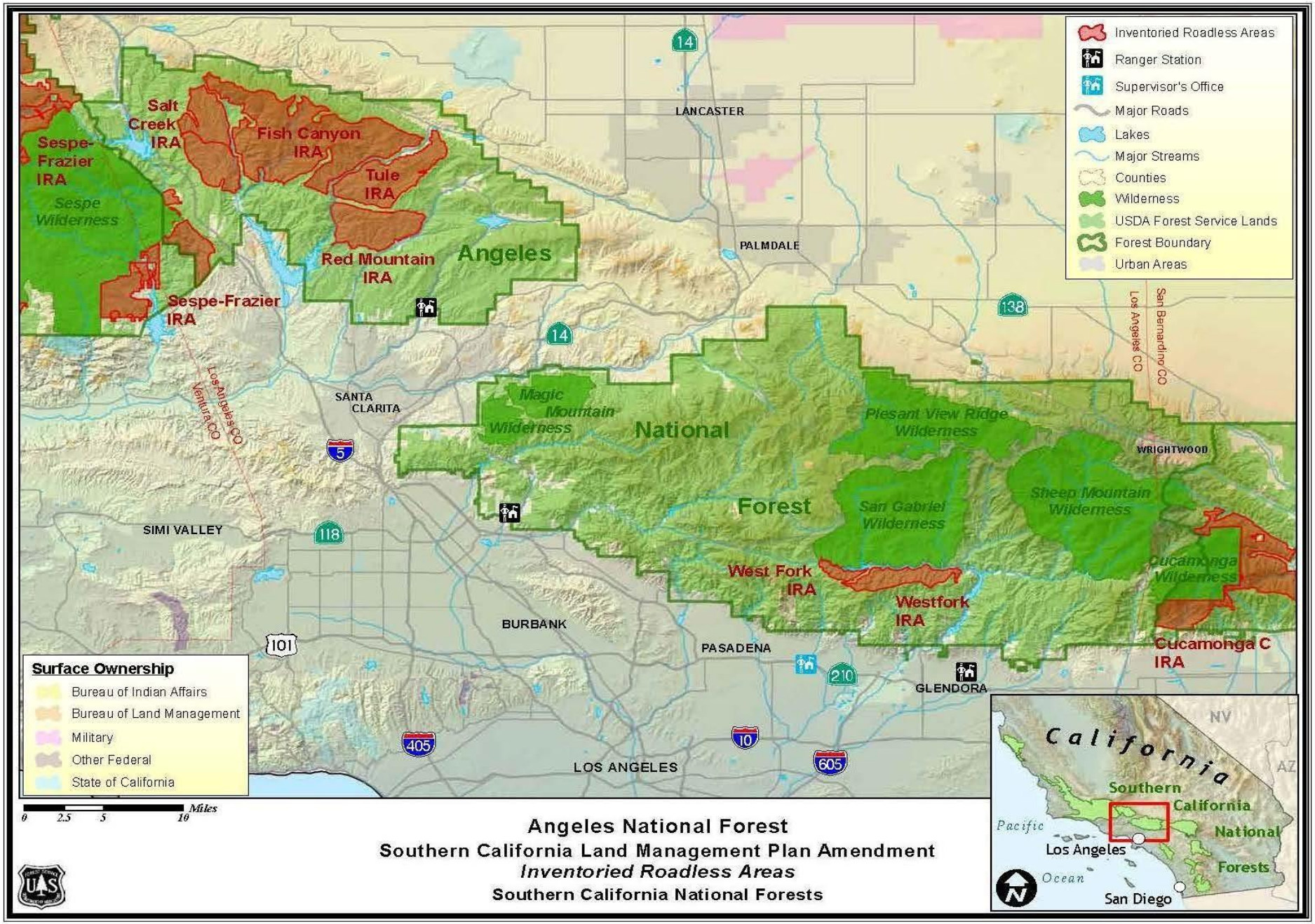
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Sespe-Frazier IRA
Tule IRA
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Sespe-Frazier IRA
LANCASTER
PALMDALE
SANTA CLARITA
Magic Mountain Wilderness
National
Forest
Pleasant View Ridge Wilderness
San Gabriel Wilderness
Sheep Mountain Wilderness
WRIGHTWOOD
West Fork IRA
Westfork IRA
Cucamonga Wilderness
Cucamonga C IRA
SIMI VALLEY
BURBANK
PASADENA
GLENDORA
LOS ANGELES
Los Angeles CO
Ventura CO
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Surface Ownership
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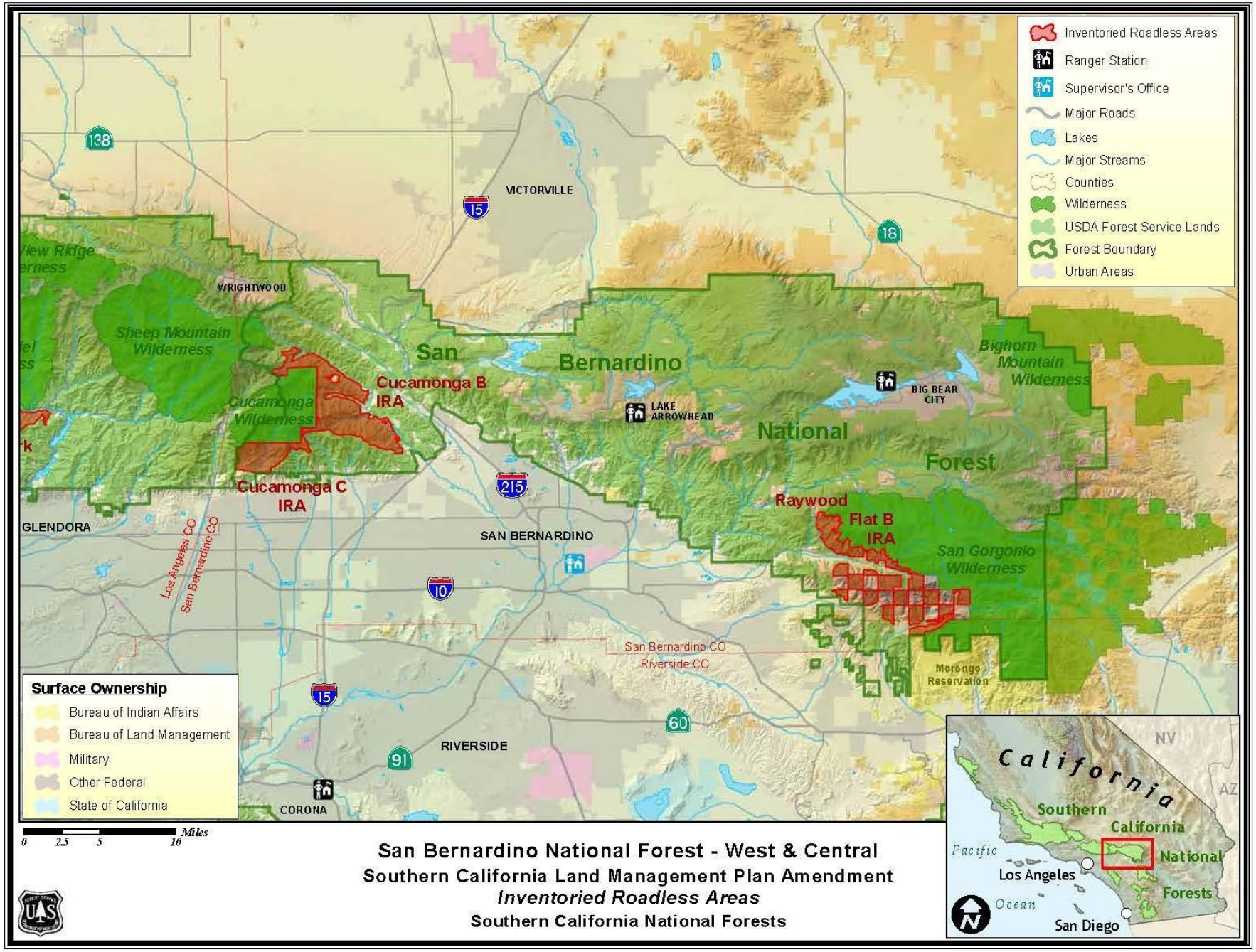
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Urban Areas
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WRIGHTWOOD
Sheep Mountain Wilderness
San Bernardino National Forest
Cucamonga Wilderness
Cucamonga B IRA
Cucamonga C IRA
LAKE ARROWHEAD
BIG BEAR CITY
Bighorn Mountain Wilderness
Raywood Flat B IRA
San Gorgonio Wilderness
Morongo Reservation
GLENDORA
SAN BERNARDINO
RIVERSIDE
CORONA
Los Angeles CO
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Riverside CO
Surface Ownership
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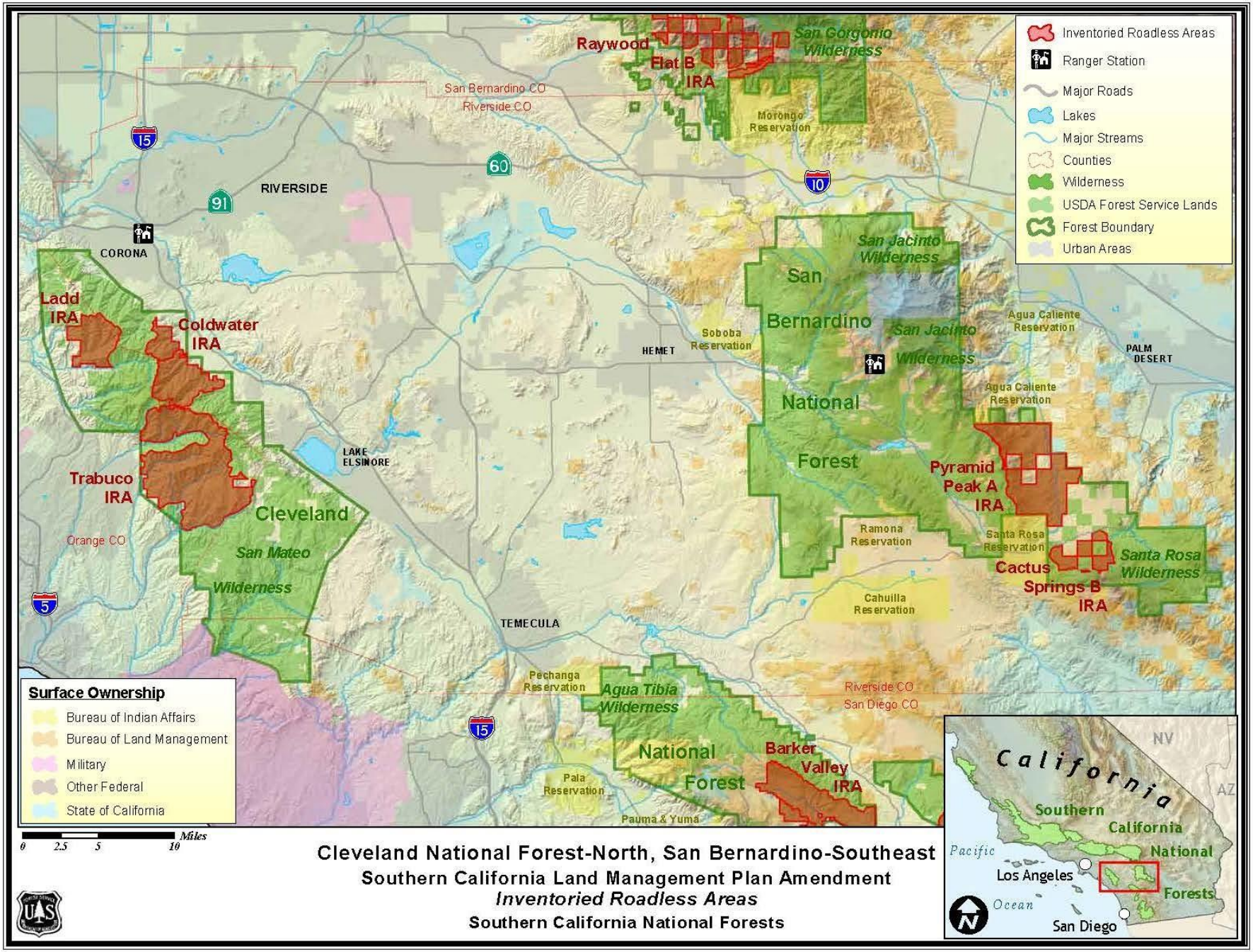
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Raywood Flat B IRA
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San Bernardino CO
Riverside CO
Morongo Reservation
RIVERSIDE
CORONA
Ladd IRA
Coldwater IRA
Trabuco IRA
Cleveland
San Mateo Wilderness
Orange CO
LAKE ELSINORE
HEMET
Soboba Reservation
San Jacinto Wilderness
San Bernardino National Forest
Agua Caliente Reservation
PALM DESERT
Pyramid Peak A IRA
Ramona Reservation
Santa Rosa Reservation
Cactus Springs B IRA
Santa Rosa Wilderness
Cahuilla Reservation
TEMECULA
Pechanga Reservation
Agua Tibia Wilderness
Riverside CO
San Diego CO
Barker Valley IRA
Pala Reservation
Pauma & Yuma
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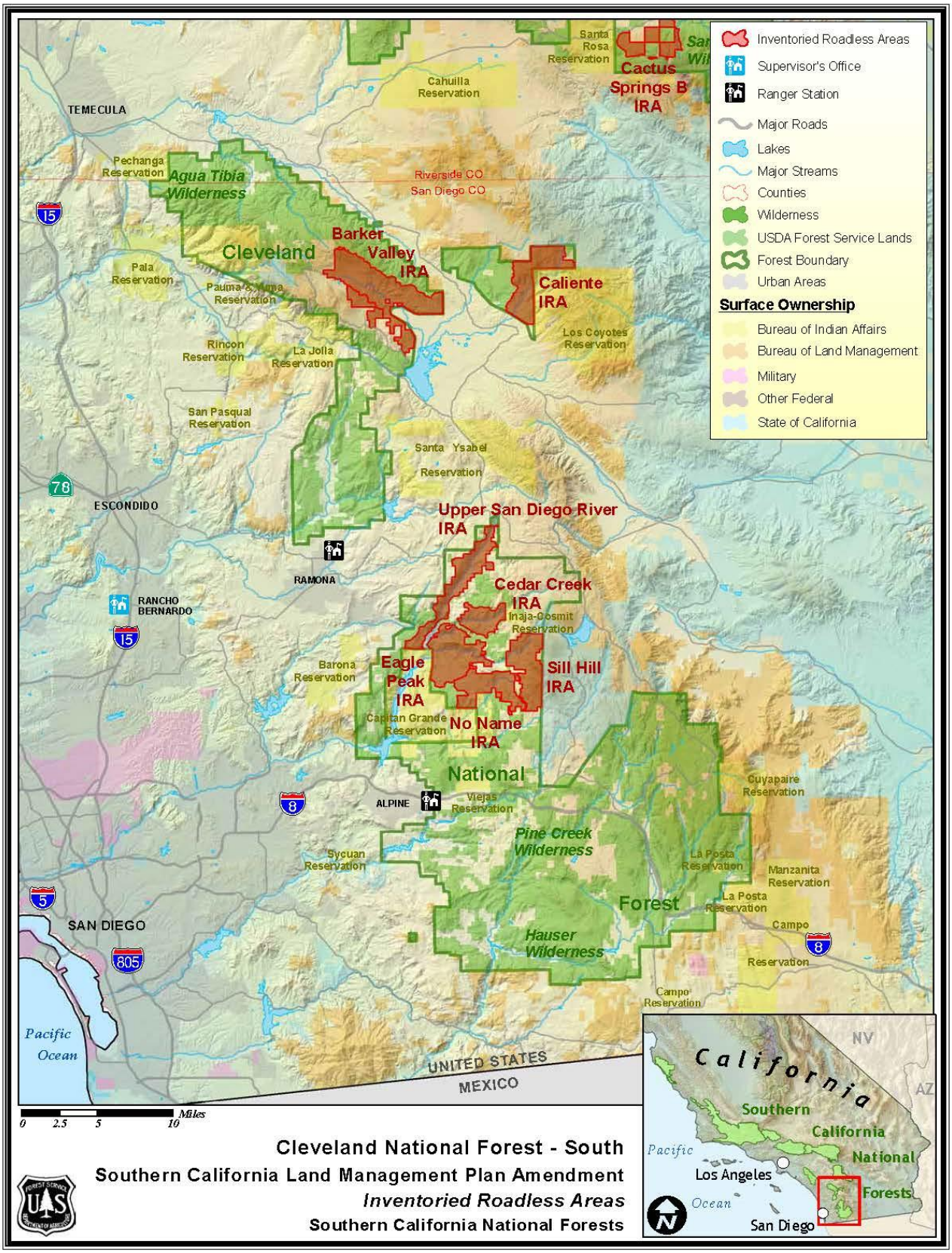
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Pechanga Reservation
Agua Tibia Wilderness
Riverside CO
San Diego CO
Barker Valley IRA
Cleveland
Caliente IRA
Pala Reservation
Pauma & Yuma Reservation
Los Coyotes Reservation
Rincon Reservation
La Jolla Reservation
San Pasqual Reservation
Santa Ysabel Reservation
ESCONDIDO
Upper San Diego River IRA
RAMONA
RANCHO BERNARDO
Cedar Creek IRA
Inaja-Cosmit Reservation
Barona Reservation
Eagle Peak IRA
Sill Hill IRA
Capitan Grande Reservation
No Name IRA
National
Cuyapaire Reservation
ALPINE
Viejas Reservation
Pine Creek Wilderness
Sycuan Reservation
La Posta Reservation
Manzanita Reservation
Forest
La Posta Reservation
Campo Reservation
SAN DIEGO
Hauser Wilderness
Campo Reservation
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Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. The comparison is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

The planning area includes all the NFS lands within the settlement agreement IRAs (614,130 acres), and adjacent NFS lands that were included in RW allocations (8,898 acres). The total area considered is 623,028 acres.

The alternatives differ in the amount of area allocated between BCNM and RW. As shown in **Figure 1** and summarized in **Table 4**, the planning area is mainly zoned in BC, BCMUR, and BCNM under the current LMP (Alternative 1 – No Action). Under Alternative 2, the primary change is a large increase in BCNM and a smaller increase in RW. Alternative 2a increases the acreage of RW relative to Alternative 2. Alternative 3 allocates the majority of the area to RW. The CB and DAI zones both decrease slightly under Alternatives 2, 2a and 3.

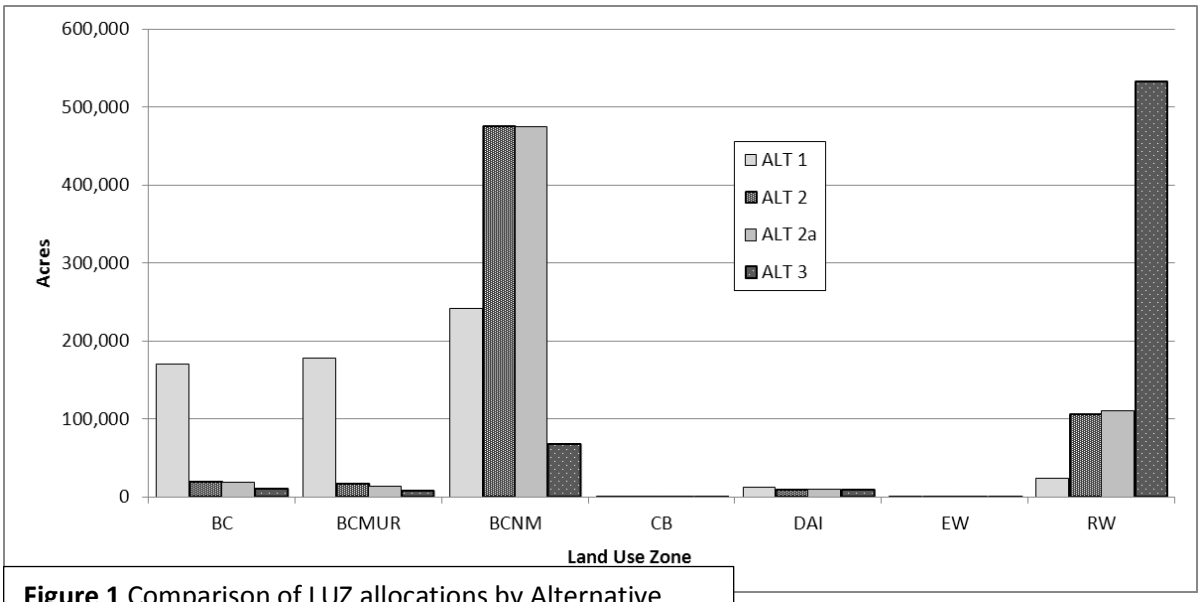

Figure 1 Comparison of LUZ allocations by Alternative

Table 4 displays the acreages of each type of land use zone for each alternative, broken out by National Forest.

Table 4. Summary of LUZ Acreage Allocations for Each Forest by Alternative				
Land Use Zone	**Alternative 1**	**Alternative 2**	**Alternative 2a**	**Alternative 3**
Angeles	**Acres**	**Acres**	**Acres**	**Acres**
Back Country	2,566	1,001	828	314
Back Country Motorized Use Restricted	4,132	1,469	707	707
Back Country Non-Motorized	66,393	30,897	30,577	1,033
Critical Biological	326	12	0	0
Developed Area Interface	1,505	476	476	430
Existing Wilderness	8	8	8	8
Recommended Wilderness	0	41,065	42,333	72,437
Cleveland	**Acres**	**Acres**	**Acres**	**Acres**
Back Country	6,262	1,965	1,876	1,752
Back Country Motorized Use Restricted	6,321	4,124	2,919	2,885
Back Country Non-Motorized	68,308	34,974	34,732	6,118
Critical Biological	507	507	0	0
Developed Area Interface	3,031	1,325	1,293	1,288
Existing Wilderness	0	0	0	0
Recommended Wilderness	0	41,535	43,609	72,387
Los Padres	**Acres**	**Acres**	**Acres**	**Acres**
Back Country	154,641	15,936	15,943	8,152
Back Country Motorized Use Restricted	164,697	10,112	10,112	3,399
Back Country Non-Motorized	86,521	379,810	379,803	59,727
Critical Biological	395	395	395	395
Developed Area Interface	7,032	7,032	7,032	7,032
Existing Wilderness	936	936	936	936
Recommended Wilderness	5,306	5,306	5,306	339,886
San Bernardino	**Acres**	**Acres**	**Acres**	**Acres**
Back Country	6,882	394	394	377
Back Country Motorized Use Restricted	3,018	816	173	191
Back Country Non-Motorized	20,332	29,692	29,692	155
Critical Biological	0	0	0	0
Developed Area Interface	1,440	773	773	773
Existing Wilderness	11	11	11	11
Recommended Wilderness	18,218	18,216	18,859	48,394

B. Sensitive Plant Species Evaluated for the Final SEIS

- The Region 5 Sensitive Plant list was revised in 2013. A regional direction letter dated 3 July 2013 instructed forests to use the revised list for all projects that did not have a signed decision document [e.g. Decision Memo (DM), Decision Notice (DN) or Record of Decision (ROD)] as of August 16, 2013 except for those instances when the Regional Forester provides an exception.
- An exception to use of the revised list was granted for this project and is included in the project record.
- This resulted in our use of the same list of Sensitive Plant species analyzed in the February 2013 Botanical Evaluation and Botany Report.
    - In that evaluation, species anticipated to be added or removed from the list were often noted in text and tables. Those notes should be disregarded.
    - For this Addendum, Tables 5 and 6 below were edited to include only those species addressed in this analysis.
- One additional sensitive plant species, *Symphyotrichum defoliatum* (San Bernardino aster) was confirmed to occur within the IRAs. This species was added to Table 6. The effects analysis for this species is included in this Addendum.

Table 5 displays the list of Sensitive Plant species evaluated for this project.

Table 6 displays the IRAs within Forests where Sensitive plant species are known to occur.

Table 5. Sensitive Plant Species And Their Locations On Southern California National Forests					
Scientific Name	**Common Name**	**Occurrences by National Forest[1, 2]**			
		ANF	**CNF**	**LPNF**	**SBNF**
Abies bracteata	Santa Lucia fir			K	
Abronia nana spp. covillei	Coville's dwarf abronia				K
Abronia villosa var. aurita	chaparral sand-verbena		P		K
Acanthoscyphus parishii var. abramsii	Abrams' flowery puncturebract			K	
Acanthoscyphus parishii var. cienegensis	Cienega Seca flowery puncturebract				K
Agrostis hooveri	Hoover's bentgrass			K	
Allium hickmanii	Hickman's onion			K	
Allium howellii var. clokeyi	Mt. Pinos onion			K	
Allium marvinii	Yucaipa onion				K
Arctostaphylos cruzensis	Arroyo de la Cruz manzanita			K	
Arctostaphylos edmundsii	Little Sur manzanita			K	
Arctostaphylos gabrielensis	San Gabriel manzanita	K			
Arctostaphylos hooveri	Hoover's manzanita			K	
Arctostaphylos luciana	Santa Lucia manzanita			K	
Arctostaphylos obispoensis	Bishop manzanita			K	
Arctostaphylos pilosula	Santa Margarita manzanita			K	
Arctostaphylos rainbowensis	Rainbow manzanita		K		
Arctostaphylos refugioensis	Refugio manzanita			K	
Arenaria lanuginosa ssp. saxosa	rock sandwort				K
Arenaria macradenia var. kuschei	Kusche's sandwort	K			
Astragalus bicristatus	crested milk-vetch	P			K
Astragalus deanei	Dean's milk-vetch		K		
Astragalus douglasii var. perstrictus	Jacumba milk-vetch		K		
Astragalus lentiginosus var. Antonius	San Antonio milk-vetch	K			K
Astragalus lentiginosus var. sierrae	Big Bear Valley milk-vetch	K			K
Astragalus oocarpus	San Diego milk-vetch		K		
Astragalus pachypus var. jaegeri	Jaeger's milk-vetch		K		K
Atriplex parishii	Parish's brittlescale				P
Baccharis plummerae ssp. glabrata	San Simeon Baccharis			P	
Bloomeria humilis	dwarf goldenstar			P	

Table 5. Sensitive Plant Species And Their Locations On Southern California National Forests					
Scientific Name	**Common Name**	**Occurrences by National Forest[1, 2]**			
		ANF	**CNF**	**LPNF**	**SBNF**
Botrychium crenulatum	scalloped moonwort	K			K
Boechera breweri var. pecuniaria	San Bernardino rock cress				K
Boechera johnstonii	Johnston's rock cress				K
Boechera parishii	Parish's rock cress				K
Boechera shockleyi	Shockley's rock cress				K
Brodiaea orcuttii	Orcutt's brodiaea		K		
Calochortus clavatus var. gracilis	slender mariposa lily	K			P
Calochortus dunnii	Dunn's mariposa lily		K		
Calochortus obispoensis	San Luis mariposa lily			K	
Calochortus palmeri var. munzii	Munz's mariposa lily				K
Calochortus palmeri var. palmeri	Palmer's mariposa lily	K		K	K
Calochortus plummerae	Plummer's mariposa lily	K	P	P	K
Calochortus simulans	San Luis Obispo mariposa lily			K	
Calochortus striatus	alkali mariposa lily	K			P
Calochortus weedii var. intermedius	intermediate mariposa lily		K		
Calochortus weedii var. vestus	late-flowered mariposa lily	K		K	
Calycadenia villosa	dwarf western rosinweed			K	
Calystegia subacaulis ssp. episcopalis	Cambria morning-glory			P	
Camissonia hardhamiae	Hardham's evening-primrose			K	
Canbya candida	pygmy poppy	K			K
Carex obispoensis	San Luis Obispo sedge			K	
Carlquista muirii	Muir's tarplant			K	
Castilleja gleasonii	Mt. Gleason's Indian paintbrush	K			
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover		P		K
Castilleja plagiotoma	Mojave Indian paintbrush	K		P	K
Caulanthus amplexicaulis var. barbarae	Santa Barbara jewel-flower			K	
Caulanthus lemmonii	Lemmon's jewel-flower			K	
Caulanthus simulans	Payson's jewel-flower		K		K
Ceanothus cyaneus	Lakeside Ceanothus		K		
Chlorogalum pomeridianum var. minus	dwarf soaproot			K	

Table 5. Sensitive Plant Species And Their Locations On Southern California National Forests					
Scientific Name	**Common Name**	**Occurrences by National Forest[1, 2]**			
		ANF	**CNF**	**LPNF**	**SBNF**
Chorizanthe blakleyi	Blakley's spineflower			K	
Chorizanthe breweri	Brewer's spineflower			K	
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	P		P	
Chorizanthe parryi var. parryi	Parry's spineflower	P	K		P
Chorizanthe polygonoides var. longispina	long-spined spineflower		K	P	K
Chorizanthe rectispina	straight-awned spineflower			K	
Cirsium loncholepis	La Graciosa thistle			P	
Clarkia delicata	delicate clarkia		K		
Clarkia jolonensis	Jolon clarkia			K	
Claytonia lanceolata var. peirsonii	Peirson's spring beauty	K			K
Deinandra floribunda	Tecate tarplant		K		
Deinandra mohavensis	Mojave tarplant	P	K		K
Delphinium hesperium ssp. cuyamacae	Cuyamaca larkspur		K		K
Delphinium hutchinsoniae	Hutchinson's larkspur			K	
Delphinium parryi ssp. purpureum	Mt. Pinos larkspur			K	
Delphinium umbraculorum	umbrella larkspur			K	
Dieteria asteroides var. lagunensis	Mount Laguna aster		K		
Dieteria canescens var. ziegleri	Ziegler's aster				K
Draba corrugata var. saxosa	rock draba				K
Dudleya abramsii ssp. affinis	San Bernardino Mountains Dudleya				K
Dudleya cymosa ssp. crebrifolia	San Gabriel River Dudleya	K			
Dudleya densiflora	San Gabriel Mountains Dudleya	K			
Dudleya multicaulis	many-stemmed Dudleya	K	K		
Dudleya viscida	sticky Dudleya		K		
Eriastrum hooveri	Hoover's eriastrum			K	
Eriastrum luteum	yellow-flowered eriastrum			K	
Eriogonum butterworthianum	Butterworth's buckwheat			K	
Eriogonum evanidum	vanishing wild buckwheat		P		H
Eriogonum kennedyi var. alpigenum	southern alpine buckwheat	K		K	K
Eriogonum microthecum var. johnstonii	Johnston's buckwheat	K			K

Table 5. Sensitive Plant Species And Their Locations On Southern California National Forests					
Scientific Name	**Common Name**	**Occurrences by National Forest[1, 2]**			
		ANF	**CNF**	**LPNF**	**SBNF**
Eriogonum microthecum var. lacus-ursi	Bear Lake buckwheat				P
Eriophyllum lanatum var. hallii	Fort Tejon woolly sunflower			K	
Fremontodendron mexicanum	Mexican flannelbush		P		
Fritillaria falcata	talus fritillary			K	
Fritillaria liliacea	fragrant fritillary			P	
Fritillaria ojaiensis	Ojai fritillary			K	
Fritillaria viridea	San Benito fritillary			K	
Galium angustifolium ssp. jacinticum	San Jacinto Mountains bedstraw				K
Galium californicum ssp. luciense	Cone Peak bedstraw			K	
Galium californicum ssp. primum	California bedstraw				K
Galium clementis	Santa Lucia bedstraw			K	
Galium grande	San Gabriel bedstraw	K			
Galium hardhamiae	Hardham's bedstraw			K	
Gentiana fremontii	moss gentian				K
Gilia leptantha ssp. leptantha	San Bernardino gilia				K
Githopsis diffusa ssp. filicaulis	Mission Canyon bluecup		K		
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	P			H
*Hesperocyparis forbesii (*formerly *Cupressus)*	Tecate cypress		K		
*Hesperocyparis stephensonii (*formerly *Cupressus arizonica ssp. arizonica)*	Cuyamaca cypress		K		
Heuchera abramsii	Abrams's alumroot	K		K	P
Heuchera elegans	urn-flowered alumroot	K		K	K
Heuchera hirsutissima	shaggy-haired alumroot				K
Heuchera parishii	Parish's alumroot				K
Horkelia cuneata ssp. puberula	mesa horkelia	P	K	K	P
Horkelia cuneata ssp. sericea	Kellogg's horkelia			P	
Horkelia truncata	Ramona horkelia		K		
Horkelia wilderae	Barton Flats horkelia				K
Horkelia yadonii	Santa Lucia horkelia			K	
Hulsea vestita ssp. *gabrielensis*	San Gabriel Mountains sunflower	K		K	P

Table 5. Sensitive Plant Species And Their Locations On Southern California National Forests					
Scientific Name	**Common Name**	**Occurrences by National Forest[1, 2]**			
		ANF	**CNF**	**LPNF**	**SBNF**
Hulsea vestita ssp. *pygmaea*	pygmy hulsea	P			K
Imperata brevifolia	California satintail	K		K	P
Ivesia argyrocoma	silver-haired Ivesia				K
Ivesia callida	Tahquitz Ivesia				K
Layia heterotricha	pale-yellow layia			K	
Layia jonesii	Jones's layia			P	
Lepechinia cardiophylla	heart-leaved pitcher sage		K		
Lepechinia fragrans	fragrant pitcher sage	K			K
Leptosiphon floribundus ssp. *hallii*	Santa Rosa Mountains leptosiphon				K
Lessingia glandulifera var. *tomentosa*	Warner Springs lessingia		K		
Lilium parryi	lemon lily	K	P		K
Limnanthes alba var. parishii	Parish's meadowfoam		K		K
Linanthus concinnus	San Gabriel linanthus	K			K
Linanthus jaegeri	San Jacinto prickly phlox				K
Linanthus killipii	Baldwin Lake linanthus				K
Linanthus orcuttii	Orcutt's linanthus	P	K		K
Lonicera subspicata var. subspicata	Santa Barbara honeysuckle			P	
Lupinus ludovicianus	San Luis Obispo lupine			K	
Lupinus peirsonii	Peirson's lupine	K			
Malacothamnus palmeri var. involucratus	Carmel Valley bush mallow			K	
Malacothamnus palmeri var. lucianus	Arroyo Seco bush mallow			K	
Malacothamnus palmeri var. palmeri	Santa Lucia bush mallow			P	
Malacothrix saxatilis var. arachnoidea	Carmel Valley malacothrix			K	
Malaxis monophyllos ssp. brachypoda	adder's-mouth				K
Marina orcuttii var. orcuttii	California marina				K
Matelea parviflora	Spearleaf				K
Meesia triquetra	three-ranked hump-moss				P
Meesia uliginosa	broad-nerved hump-moss				P
Mimulus exiguus	San Bernardino Mountains monkeyflower				K
Mimulus purpureus	purple monkeyflower				K

Table 5. Sensitive Plant Species And Their Locations On Southern California National Forests					
Scientific Name	**Common Name**	**Occurrences by National Forest[1, 2]**			
		ANF	**CNF**	**LPNF**	**SBNF**
Monardella hypoleuca ssp. lanata	felt-leaved monardella		K		
Monardella linoides ssp. oblonga	flax-like monardella			K	
Monardella macrantha ssp. hallii	Hall's monardella	K	K		K
Monardella nana ssp. leptosiphon	San Felipe monardella		K		K
Monardella palmeri	Palmer's monardella			K	
Monardella viridis ssp. saxicola	rock monardella	K			K
Nasturtium gambelii	Gambel's water cress				P
Navarretia peninsularis	Baja Navarretia	P	P	K	K
Nolina cismontana	chaparral nolina		K	K	
Opuntia basilaris var. brachyclada	short-joint beavertail	K			K
Oreonana vestita	woolly mountain-parsley	K			K
Orobanche valida ssp. valida	Rock Creek broomrape	K		K	K
Packera bernardina	San Bernardino ragwort				K
Packera ganderi	Gander's ragwort		K		
Parnassia cirrata var. cirrata	fringed grass-of-parnassus	K			K
Pedicularis dudleyi	Dudley's lousewort			K	
Penstemon californicus	California beardtongue		K		K
Pentachaeta exilis ssp. aeolica	slender pentachaeta			K	
Phacelia exilis	Transverse Range phacelia	P		P	K
Phacelia keckii	Keck’s phacelia		K		
Phlox dolichantha	Big Bear Valley phlox				K
Plagiobothrys uncinatus	hooked popcorn-flower			K	
Potentilla glandulosa ssp. ewanii (now *Drymocallis cuneifolia var. ewanii or D. cuneifolia var. cuneifolia)*	Ewan's cinquefoil	K			K
Potentilla rimicola	cliff cinquefoil				K
Pyrrocoma uniflora var. gossypina	Bear Valley Pyrrocoma				K
Quercus dumosa	Nuttall's scrub oak			P	
Ribes canthariforme	Moreno currant		K		
Saltugilia latimeri	Latimer's woodland-gilia				K
Sanicula maritima	adobe sanicle			K	

Table 5. Sensitive Plant Species And Their Locations On Southern California National Forests					
Scientific Name	**Common Name**	**Occurrences by National Forest[1, 2]**			
		ANF	**CNF**	**LPNF**	**SBNF**
Satureja chandleri	San Miguel savory		K		
Scutellaria bolanderi ssp. austromontana	southern skullcap	P	K		K
Sedum niveum	Davidson's stonecrop				K
Sibaropsis hammittii	Hammitt's clay-cress		K		
Sidalcea hickmanii ssp. anomala	Cuesta Pass checkerbloom			K	
Sidalcea hickmanii ssp. hickmanii	Marin checkerbloom			K	
Sidalcea hickmanii ssp. parishii	Parish's checkerbloom	P		K	K
Sidotheca caryophylloides	chickweed starry puncturebract	K		K	K
Sidotheca emarginata	white-margined starry puncturebract				K
Streptanthus albidus ssp. peramoenus	most beautiful jewelflower			K	
Streptanthus bernardinus	Laguna Mountains jewelflower	P	K		K
Streptanthus campestris	southern jewelflower	K	K	K	K
Symphyotrichum defoliatum	San Bernardino aster	P	K	P	K
Tetracoccus dioicus	Parry's tetracoccus		K		
Thelypteris puberula var. sonorensis	Sonoran maiden fern	K		K	K
Thermopsis californica var. semota	velvety false lupine		K		
Thermopsis macrophylla	Santa Ynez false lupine			K	
Tritelia ixioides ssp. cookii	Cook's triteleia			K	
Tropidocarpum capparideum	caper-fruited tropidocarpum			P	
Viola pinetorum ssp. grisea	grey-leaved violet			K	
[1]K=Known to occur on USFS lands P=Potential to occur on USFS lands	[2] =Reflects R5 Sensitive Plant List prior to August 2013 update				

Table 6. IRAs Within Forests Where Sensitive Plant Species are Known to Occur	
Scientific Name	**Occurrence Information**
Acanthoscyphus parishi var. *abramsii*	Sespe – Frazier (LPNF)
Allium howellii var. clokeyi	Sespe – Frazier (LPNF)
Arctostaphylos pilosula	Black Mountain (LPNF), Machesna Mountain (LPNF)
Arctostaphylos refugioensis	Tequepis (LPNF)
Arenaria lanuginosa ssp. saxosa	Raywood Flat B (SBNF)
Astragalus bicristatus	Cactus Springs B (SBNF)
Astragalus deanei	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River New, Upper San Diego River (CNF)
Astragalus oocarpus	Barker Valley, Eagle Peak (CNF)
Boechera johnstonii	Pyramid Peak A (SBNF)
Botrychium crenulatum	Raywood Flat B (SBNF)
Brodiaea orcuttii	Barker Valley, Sill Hill (CNF)
Calochortus clavatus ssp. g*racilis*	Fish Canyon (ANF), Red Mountain (ANF), Salt Creek (ANF), Sespe-Frazier (ANF), Tule (ANF)
Calochortus dunnii	Sill Hill (CNF)
Calochortus palmeri var. *munzii*	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)
Calochortus palmeri var. palmeri	Garcia Mountain (LPNF), Machesna Mountain (LPNF), Sespe – Frazier (LPNF)
Calochortus plummerae	Raywood Flat B (SBNF), West Fork (ANF), Westfork (ANF)
Calochortus simulans	Garcia Mountain (LPNF), Machesna Mountain (LPNF), Spoor Canyon (LPNF)
Calochortus weedii var. intermedius	Coldwater, Ladd (CNF)
Calochortus weedii var. vestus	Dry Lakes (LPNF), Sespe – Frazier (LPNF), Tequepis (LPNF), White Ledge (LPNF)
Calycadenia villosa	Black Mountain (LPNF)
Castilleja gleasonii	Fish Creek (ANF)
Castilleja lasiorhyncha	Raywood Flat B (SBNF)
Caulanthus simulans	Barker Valley (CNF),
Chorizanthe blakleyi	Fox Mountain (LPNF), Spoor Canyon (LPNF)
Chorizanthe parryi var. *parryi*	Coldwater (CNF)
Chorizanthe polygonoides var.	Barker Valley (CNF)

Table 6. IRAs Within Forests Where Sensitive Plant Species are Known to Occur	
Scientific Name	**Occurrence Information**
longispina	
Chorizanthe rectispina	Black Mountain (LPNF)
Clarkia delicata	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River New, Upper San Diego River (CNF)
Delphinium hesperium ssp. cuyamacae	Sill Hill (CNF)
Delphinium umbraulorum	Diablo (LPNF), Fox Mountain (LPNF), Garcia Mountain (LPNF), Machesna Mountain (LPNF), Sespe – Frazier (LPNF), Spoor Canyon (LPNF), Tequepis (LPNF), White Ledge (LPNF)
Dieteria canescens var. *ziegleri*	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)
Draba corrugata var. *saxosa*	Cactus Springs B (SBNF)
Dudleya viscida	Trabuco (CNF)
Eriastrum luteum	Black Mountain (LPNF)
Eriophyllum lanatum var. *hallii*	Fox Mountain (LPNF)
Fritillaria ojaiensis	Sespe – Frazier (LPNF), Tequepis (LPNF), White Ledge (LPNF)
Galium angustifolium ssp. *jacinticum*	Cactus Springs B (SBNF)
Gilia leptantha ssp. *Leptantha*	Raywood Flat B (SBNF)
Hesperocyparis stephensonii	Sill Hill (CNF), Upper San Diego River (CNF)
Heuchera hirsutissima	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)
Heuchera parishi	Raywood Flat B (SBNF)
Horkelia cuneata ssp. *puberula*	Trabuco (CNF)
Horkelia truncata	Ladd (CNF)
Imperata brevifolia	Antimony (LPNF), Dry Lakes (LPNF), West Fork (ANF), Westfork (ANF)
Layia heterotricha	Antimony (LPNF), Fox Mountain (LPNF), Quatal (LPNF), Sespe – Frazier (LPNF)
Lepechinia cardiophylla	Coldwater (CNF), Ladd (CNF), Trabuco (CNF)
Lepechinia fragrans	West Fork (ANF), Westfork (ANF)
Lilium parryi	Cactus Springs B (SBNF), Cactus Springs B New (SBNF), Raywood Flat B (SBNF), West Fork (ANF),
Limnanthes alba var. *parishi*	Barker Valley (CNF)

Table 6. IRAs Within Forests Where Sensitive Plant Species are Known to Occur	
Scientific Name	**Occurrence Information**
Linanthus orcutti	Caliente (CNF)
Malacothrix saxatilis var. arachnoidea	Mudulce (LPNF)
Monardella linoides ssp. *oblonga*	Sespe – Frazier (LPNF)
Monardella macrantha ssp. *hallii*	Barker Valley (CNF), Caliente (CNF), Coldwater (CNF)
Monardella nana ssp.leptosiphon	Barker Valley (CNF)
Navarretia peninsularis	Sawmill – Badlands (LPNF), Sespe – Frazier (LPNF)
Nolina cistmontana	Trabuco (CNF)
Opuntia basiliaris ssp. *brachyclada*	Fish Canyon (ANF), Red Mountain (ANF), Sespe-Frazier (ANF), Tule (ANF)
Parnassia cirrata var. cirrata	Raywood Flat B (SBNF)
Penstemon californicus	Pyramid Peak A (SBNF)
Phacelia excilis	Sespe – Frazier (LPNF)
Phacelia keckii	Coldwater (CNF), Ladd (CNF), Trabuco (CNF)
Saltugilia latimeri	Cactus Springs B (SBNF)
Satureja chandleri	Trabuco (CNF)
Sedum niveum	Cactus Springs B (SBNF)
Sidalcea hickmanii ssp. parishi	Fox Mountain (LPNF), Machesna Mountain (LPNF), Spoor Canyon (LPNF), Raywood Flat B (SBNF)
Sidotheca emarginata	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)
Streptanthus bernardinus	Cucamonga B (SBNF)
Streptanthus campestris	White Ledge (LPNF), Cactus Springs B (SBNF)
Symphyotrichum defoliatum	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River New, Upper San Diego River (CNF)
Tetracoccus dioicus	Trabuco (CNF)
Thermoposis californica var. *semota*	Sill Hill (CNF), Upper San Diego River (CNF)
Thermopsis macrophylla	Tequepis (LPNF)

C. Methods used in the Analysis

An updated explanation of the methods used to determine species presence within the IRAs is provided. Only those species with known occurrences in the project areas are discussed in depth in this Addendum and the February 2013 Biological Evaluation. Scientific nomenclature and common names for species referred to in this report follow those used in the LMP (USDA Forest Service 2006), with updated nomenclature.

Existing condition discussions for plant species and vegetation communities can be found in the Wilderness Evaluations (Appendix 2 of the Final SEIS) that were prepared for each of the 37 IRAs. Botanical updates to the evaluations were completed in response to comments to the Draft SEIS when species were confirmed to occur.

Detailed species accounts and viability assessments for all sensitive species were prepared during the 2006 revision of the LMP (USDA Forest Service 2006). These species accounts include information on status of populations and habitat, natural history, risks, conservation considerations, and viability analyses. These species accounts are incorporated by reference. The species accounts are located on the Final Supplemental Impact Statement (SEIS), Southern California National Forests land Management plan (LMP) Amendment website in the Supporting section under Project Documents. They are titled Southern California National Forests Species Accounts-Plants. When changes to status of species had occurred, the most up to date information was utilized.

While comprehensive botanical surveys for plant species at risk and general botanical resources have not been conducted on all acreage within the 37 IRAs, some areas have been surveyed and data collected. For the IRA analysis, information on occurrences of plant species contained within the IRAs was derived from Forest Service (NRIS, GIS) databases. Geographical Information Systems (GIS) data were gathered from the US Fish and Wildlife Service's (FWS) Critical Habitat portal (http://criticalhabitat.fws.gov/) and Forest Service's Natural Resource Manager (NRM-TESP) which included T/E plant species locations. The California Native Plant Society Inventory of Rare and Endangered Plants (2013) was utilized. The California Consortium of Herbaria (2013) was utilized to assess locations of rare plant occurrences identified in public comment letters and in the effects analysis for *Symphyotrichum defoliatum* and *Astragalus deanei.*

Botanists from all four Forests provided input and review of the February 2013 analysis. Where applicable, the botanists assisted with the effects analysis for species addressed in this Addendum. Others assisted with process and documentation recommendations.

In the Final SEIS, land use zones may be modified however no site specific activities are proposed or approved. Therefore, no ground disturbing actions will occur as a result of the SEIS Record of Decision. In the future, if activities are proposed within these areas, site specific NEPA will be required prior to implementation. At that time a more focused analysis would be conducted for sensitive species and additional sources of information such as the California Consortium of Herbaria and the California Natural Diversity Database would be utilized.

D. Updated analysis for 3 species affected by changes from Critical Biological zoning to Recommended Wilderness in Alternative 2a

The effects analysis for *Brodiaea orcuttii, Calochortus dunnii*, and *Hesperocyparis stephensonii* completed in the February 2013 Biological Evaluation included effects due to the rezoning of the King Creek Critical Biological land use zone to Recommended Wilderness in Alternative 3. In the SEIS, analysis for these species is unusual as they are the only sensitive plant species known to occur within Critical Biological land use zones. Critical Biological zones were developed for the LMP revision (USFS FS 2006) to retain the natural character and habitat characteristics in this zone and limit the level of human development to manage for protection of species-at-risk. The King Creek Critical Biological zone was established within the Sill Hill IRA to protect the target species *Hesperocyparis stephensonii (Cuyamaca cypress). Brodiaea orcuttii* and *Calochortus dunnii* benefit by their presence within this zone.

The analysis for these three species below includes the addition of Alternative 2a and the effects of rezoning Critical Biological to Recommended Wilderness. It also corrects the Alternative 2 analysis for *Hesperocyparis stephensonii.* While the analysis is slightly more complex, the determination of effects for Alternatives 1, 2 and 3 remain the same as described in the February 2013 Biological Evaluation (No impact, beneficial effect).

The analysis of effects assumes that the viability assessments and the effects determinations developed for the LMP FEIS (USDA Forest Service 2006) are the baseline for Alternative 1 (No Action). See the Environmental Consequences sections in the 2006 FEIS for discussions of expected effects and viability assessments for Sensitive plants that were associated with the selected alternative. See Biological Evaluation and viability assessments in the LMP FEIS (USDA Forest Service 2006- Project Record and Reading Room). Those discussions provide the basis for all species assessed in this Addendum and they are incorporated here by reference.

***Brodiaea orcuttii* (Orcutt's Brodiaea)**

Species Information: Brodiaea orcuttii, Orcutt's brodiaea, is endemic to the Peninsular Ranges of San Diego and southern Riverside counties and Baja California, Mexico. It may also occur in San Bernardino and Orange Counties. *Brodiaea orcuttii* is an herbaceous perennial from a subglobose corm. *Brodiaea orcuttii* occurs along drainages and vernally wet areas in needlegrass grasslands, closed-cone coniferous forest, cismontane woodlands, chaparral, and meadow habitats below 1615 meters (5300 feet). It is associated with clay, serpentine, and gravelly loam soils. Plants thrive in full sun in the presence of seasonal standing water for a short period of time in seeps, vernal pools, and depressions and may require drying of the soils during plant dormancy.

Occurrences in IRAs: This species is known to occur on the CNF. There are 134.45 acres of mapped occupied habitat in the Barker Valley (53.55 acres) and Sill Hill (80.9 acres) IRAs.

Potential Effects:

Alternative 1 (No Action)

The current land use zones would be retained. There are currently 53.55 acres in BCMUR, 13.4 acres in BCNM, and 67.50 acres in CB.

Alternative 2
Some BCMUR acres would change to RW resulting in 17.35 acres in BCMUR, 67.50 acres in CB and 49.60 acres in RW.

Alternative 2a
Some BCMUR acres would change to RW resulting in 17.35 acres in BCMUR and 49.60 acres in RW. The 67.50 acres in CB would also change to RW. This would result in a total of 117.10 acres in RW.

Alternative 3
Same as 2a. Some BCMUR acres would change to RW resulting in 17.35 acres in BCMUR and 49.60 acres in RW. The 67.50 acres in CB would also change to RW. This would result in a total of 117.10 acres in RW.

For alternative 1, the effects are the same as those expected and documented in the Project Record from the selected alternative in the 2006 LMP FEIS.

The potential for effects due to suitable uses may be reduced under Alternative 2 and further reduced under Alternatives 2a and 3. In Alternatives 2a and 3, the CB zone change to RW would normally result in camping being a suitable use; however, this location would continue to be managed as the King Creek Research Natural Area (RNA) and the occurrence is within the RNA. A comparison of the 29 suitable uses (activities) allowed under Critical Biological zoning verses Recommended Wilderness is shown in Table 3. Of the 29 activities, 5 would be more restrictive under Recommended Wilderness than under Critical Biological zoning. The other 24, with the exception of dispersed camping in Critical Biological, are the same for both Critical Biological and Recommended Wilderness. As a result, Alternatives 2a and 3 are not expected to negatively impact the species and they may benefit the species.

Determination of Effects: It is my determination that Alternative 2, 2a or 3 would not negatively affect this species. The effects of Alternatives 2, 2a and 3 may be beneficial for this species. Of the three alternatives, Alternatives 2a and 3 have the potential to be the most beneficial.

***Calochortus dunnii* (Dunn's Mariposa Lily)**
Species Information: Calochortus dunnii, Dunn's mariposa lily, is present in the southern Peninsular Ranges from southern San Diego County and Baja California, Mexico. Within the southern California NFS lands, *Calochortus dunnii* is only known from the CNF. The CNF has 18 occurrence records for *Calochortus dunnii*. Plants occur on the West Fork King Creek, north of Morena Creek and Palomar, Barber and Guatay Mountains. *Calochortus dunnii* is a branched herbaceous perennial from a bulb. Like other *Calochortus* species, *C. dunnii* appears to be a fire follower, occupying early successional habitats following disturbance. *Calochortus dunnii* is associated with gabbro and metavolcanic soils or sandstone, in closed-cone coniferous forest, rocky openings in chaparral, and grassland/chaparral ecotones at elevations of 1,220–5,950 feet (375–1,830 meters).

Occurrences in IRAs: This species is known to occur on the CNF in the Sill Hill IRA. There are 16.08 acres of mapped occurrences; all are in CB.

Potential Effects:
Alternatives 1 and 2
The current land use zones would be retained. There are 16.08 acres in CB.

Alternatives 2a and 3
All 16.08 acres of occupied habitat would change from CB to RW.

For Alternative 1, the effects are the same as those expected and documented in the Project Record from the selected alternative in the 2006 LMP FEIS.

Effects in Alternative 2 would be the same as those in Alternative 1. All acres are within the King Creek CB zone, managed within the King Creek RNA and subject to RACR regulations within the Sill Hill IRA. Minimal effects are anticipated.

In Alternatives 2a and 3, the CB change to RW would normally result in camping being a suitable use; however, this location would continue to be managed as the King Creek Research Natural Area (RNA) and the occurrences are within the RNA. A comparison of the 29 suitable uses (activities) allowed under Critical Biological zoning verses Recommended Wilderness is shown in Table 3. Of the 29 activities, 5 would be more restrictive under Recommended Wilderness than under Critical Biological zoning. The other 24, with the exception of dispersed camping in Critical Biological, are the same for both Critical Biological and Recommended Wilderness. As a result, Alternatives 2a and 3 are not expected to negatively impact the species and they may benefit the species.

Determination of Effects: It is my determination that Alternative 2, 2a or 3 would not negatively affect this species. The effects of Alternatives 2a and 3 may be beneficial for this species. Of the three alternatives, Alternatives 2a and 3 have the potential to be the most beneficial.

***Hesperocyparis stephensonii* (Cuyamaca Cypress)**
Species Information: This species was formerly known as *Cupressus arizonica ssp. a*. *Hesperocyparis stephensonii*, Cuyamaca cypress, is endemic to the Cuyamaca Mountains of San Diego County and is the most narrowly distributed cypress in California. It occurs in several groves in the Cuyamaca Peak/King Creek area. *Hesperocyparis stephensonii* groves represent a single population that occurs naturally over an estimated 230 acres (93 hectares), both on the CNF and in Cuyamaca Rancho State Park. In 1991, the CNF established the King Creek Research Natural Area to protect this species and its habitat. A population on the CNF in the Agua Tibia Wilderness near Palomar Mountain, apparently planted by homesteaders, was destroyed in the Pechanga Fire in 2000.

Hesperocyparis stephensonii is a gymnosperm in the cypress family (Cupressaceae). It is a closed-coned conifer that relies on fire for reproduction. Fire is required to open the cones so that seeds are shed. Fire is also important because it enhances seed germination. Cones may open as a result of old age or other causes, but seeds rarely become established in the absence of fire. The seeds germinate during the winter following a fire event.

Hesperocyparis stephensonii usually grows in gabbro-derived clay soils on steep slopes along drainages. It can be dominant in the canopy or co-dominant with Coulter pine (*Pinus coulteri*)

and coast live oak (*Quercus agrifolia*). The species occurs at elevations of 3,400-5,600 feet (1,030-1,705 meters). Groves are typically surrounded by chaparral vegetation composed of chamise, manzanita, and scrub oak.

Occurrences in IRAs: There are 214.65 acres of mapped occurrences in the Sill Hill IRA (CNF), with 26.56 acres BCNM, 167.48 acres CB, and 20.61 acres DAI in Sill Hill. The King Creek CB zone is also within the King Creek Research Natural Area.

Potential Effects:
Alternative 1 (No Action)
The current land use zoning would be retained. There are 20.61 acres in DAI, 26.56 acres in BCNM, and 167.48 acres in CB.

Alternative 2
The 20.61 acres of DAI would be retained and 26.56 acres would be in RW. The 167.48 acres in CB would be retained.

Alternative 2a
The 20.61 acres in DAI would be retained and 26.56 acres would be in RW. The 167.48 acres of CB would change to RW resulting in a total of 194.04 acres in RW.

Alternative 3
Same as Alternative 2a. The 20.61 acres in DAI would be retained, 26.56 acres would be in RW and the 167.48 acres of CB would be RW resulting in a total of 194.04 acres in RW.

For Alternative 1, the effects are the same as those expected and documented in the Project Record from the selected alternative in the 2006 LMP FEIS.

Any effects on the 20.61 acres of DAI would remain the same under all four alternatives. The potential for effects due to suitable uses in the BCNM zoning may be reduced under Alternative 2 and there may be beneficial effects.

In Alternatives 2a and 3, the CB change to RW would normally result in camping being a suitable use; however, this location would continue to be managed as the King Creek Research Natural Area (RNA) and occurrences are within the RNA. The use of the area for research and monitoring of natural forest processes would continue. Continuing to manage the area as an RNA is expected to benefit the Cuyamaca cypress. A comparison of the 29 suitable uses (activities) allowed under Critical Biological zoning verses Recommended Wilderness is shown in Table 3. Of the 29 activities, 5 would be more restrictive under Recommended Wilderness than under Critical Biological zoning. The other 24, with the exception of dispersed camping in Critical Biological, are the same for both Critical Biological and Recommended Wilderness. As a result, Alternatives 2a and 3 are not expected to negatively impact the species and may be beneficial to the species.

Determination of Effects: It is my determination that Alternative 2, 2a or 3 would not negatively affect this species. The effects of Alternatives 2, 2a and 3 may be beneficial for this species. Of

the three alternatives, Alternatives 2a and 3 have the potential to be the most beneficial for this species.

E. Additional effects analysis for *Astragalus deanei* due to land use zone changes from BCNM TO BCMUR in Alternatives 2, 2a and 3.

Astraglus deanei was addressed in the February 2013 Biological Evaluation for the Draft SEIS and that determination of effects is still current. Of the 72 sensitive species known to occur and analyzed in the IRAs, *A. deanei* is the only species with a determination of ***"may affect individuals but will not lead towards a trend towards federal listing."*** The rationale for this determination is provided below.

Alternative 1 (No Action)

There are 14.74 acres of occupied habitat zoned as BCNM. Of these acres, 0.35 acres are known within the Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River (New) Adjacent Area and 14.39 acres are known in the Upper San Diego River IRA (UDA). These occurrences are located within an Undeveloped Area, not an IRA, thus neither are subject to Roadless Rule regulations.

Alternatives 2, 2a and 3

The 14.74 acres within BCNM would be rezoned to BCMUR and remain exempt from the Roadless Rule Regulations. The effect of rezoning non-motorized habitat to motorized use restricted habitat would not result in "no impact" nor would it be beneficial to the species. This results in a determination of ***"may affect individuals but will not lead towards a trend towards federal listing."***

The following rationale was used to determine that selection of Alternatives 2, 2a and 3 would not lead towards a trend towards federal listing for *Astragalus deanei* :

- In the Final SEIS, land use zones may be modified however no site specific activities are proposed or approved. Therefore, no ground disturbing actions would occur as a result of the SEIS Record of Decision. In the future, if activities are proposed within these areas, site specific NEPA will be required prior to implementation. At that time a more focused effects analysis would be conducted for *Astragalus deanei*. When completing a Biological Evaluation for a future project, the Cleveland National Forest Land Management Plan Design Criteria would be utilized to propose site specific mitigation to protect occurrences.

- The Back Country Motorized Use Restricted land use zone is managed for non-motorized (mechanized, equestrian, and pedestrian) public access. Motorized use is restricted to administrative purposes only that include Forest Service, other agency, or tribal government needs, as well as access needed to private land or authorized special uses. Administrative access is intermittent and generally limited to existing roads or to temporary roads needed for resource management purposes. The intent is to use temporary roads or gated permanent roads while management is occurring and then gate the permanent roads or remove the temporary route when done. Although this zone allows a range of low intensity land uses, the management intent is to retain the natural character of the zone and limit the level and type of development. Some roads

will be constructed and maintained, but the intent is to manage the zone for no increase or very low level of increase in system development (USDA Forest Service 2006)

- There are 21 documented occurrences of *A. deanei* that range in size from 1 plant to 200 plants in the CNDDB (2011) and California Consortium of Herbaria (2012) as stated in the 2012 USFS revised species account for *A. deanii* (USDA Forest Service 2012).

- There are recent (2011) vouchered specimens from the project area (Winter, pers comm. 2013, USDA and San Diego Natural History Museum Cost Share 2011, California Consortium of Herbaria 2013).

- California Consortium of Herbaria specimen SD17303 dated 18 Dec 2005 states "fairly common on burned slopes in this area."

- Floristic surveys conducted in the project area in 2011 state "most populations previously indicated on CNDDB maps as *Astragalus oocarpus* (Fabaceae) in the areas that we surveyed near the San Diego River were actually *Astragalus deaneii*." (Hains, 2011) therefore more populations are known.

- Consortium records and personal communication with Kirsten Winter, Cleveland National Forest, Forest biologist confirm that as additional surveys are completed, new occurrences have a high chance of being located and protected within lands adjacent to the Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River (New) Adjacent Area. Within this "New" area, increases of 1,816 acres, 2,154 acres and 2,288 acres are recommended for wilderness (RW) in Alternatives 2, 2a and 3 respectively.

- No designated routes are presently associated with the *A. deanei* occurrence on the west side of the San Diego River. It is the Forest's intent to rezone the area from BCNM to BCMUR to facilitate emergency access to the Cedar Falls area as needed. The Forest recently completed NEPA to address issues and impose management restrictions in this popular recreation area. The new restrictions on use of alcohol and limiting visitor use by day are expected to reduce safety issues and resource damage. This may benefit *A. deanei*. Despite these changes, the need for emergency access is still anticipated.

- My twenty four years of personal observations of 5 species of *Astragalus* (3 of which are USFS Region 5 Sensitive species) on the Cleveland and San Bernardino National Forests indicate 1) plants are usually found within disturbed sites along trails, roads and within grazed and burned areas and, 2) over time as lands recover or are restored, plant numbers decline and seed remains banked in the soil.

F. Effects analysis for *Symphyotrichum defoliatum*, an additional Sensitive Plant species now known to occur within the IRAs.

Symphyotrichum defoliatum (San Bernardino aster)

Species Information: Symphyotrichum defoliatum is a USFS Region 5 Sensitive Plant species and is a CNPS List: 1B.2 species. It is vouchered in the California Consortium of Herbaria with

173 specimens. Of these, at least 28 are duplicates and it is unsure whether the other 145 specimens were collected at separate locations. Since 1980, thirty six specimens were collected that are presumed extant. Twenty nine of these are from the mountains in San Diego where at least 15 of the occurrences are extant. Outside of San Diego County, the species is not all that common which is also true on the San Bernardino National Forest and it is very sparse in the Santa Ana Mountains of the Cleveland National Forest. In San Bernardino County, the Consortium lists 43 localities of which three (8%) have been obtained in the last 20 years and over 90 percent date from before 1952. Of the 15 Los Angeles County records, only one (7%) is recent while 13 (~85 %) are prior to 1952. There are 16 combined collections from Orange, Riverside, Kern and San Luis Obispo Counties. Only one of these, (Blue Jay Campground) was obtained in the last 20 years (Roberts, pers. comm. 2012).

Symphyotrichum defoliatum is a dicot in the sunflower family (Asteraceae). It is a perennial rhizomatous herb that flowers from July-November (Baldwin *et al.* 2012). It occurs near ditches, springs, and seeps in cismontane woodlands, valley foothill grasslands, coastal scrub, lower montane coniferous forest, meadows, swamps and marshes from 2 to 2040 meters (USDA Forest Service 2013).

Occurrences in IRAs: Using geographical coordinates and habitat information from Hirshberg specimens SD196321 and SD207683 in the California Consortium of Herbaria, there are two occurrences within the Upper San Diego River IRA (UDA). The Cleveland Forest Biologist confirmed the plant is present in the IRA. In Alternatives 2, 2a and 3, these occurrences are also within the Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego New (Adjacent) Area. Acreages for these occurrences are not available.

Specimen SD196321 (33.030 -116.672) occurs 200 m NE of pond at Deadman Flat. This location is most likely in Section 21.

Specimen SD207683 (33.034 -116.673) is located 5 miles N of intersection with Hwy 78 and 79, 1 Mile NW of intersection of Eagle Peak Road in swale NW of holding pond. This location is most likely in Section 16.

Potential Effects:
Alternative 1 (No Action)
Using the Berkeley mapper on the California Consortium of Herbaria website and habitat information on each of the two vouchers, both locations are zoned BCNM.

Alternatives 2, 2a and 3
Using the Berkeley mapper on the California Consortium of Herbaria website and habitat information on each of the two vouchers, both locations would become RW.

For Alternative 1, the effects are the same as those expected and documented in the Project Record from the selected alternative in the 2006 LMP FEIS. A reduction in suitable uses within the RW in Alternatives 2, 2a or 3 may benefit this species and its habitat.

Determination of Effects: It is my determination that Alternatives 2, 2a or 3 would not negatively impact this species. The effects of Alternatives 2, 2a or 3 may be beneficial to this species.

G. Determination of effects for Region 5 Sensitive Plant species known to occur within the IRAs

Table 1 provides a summary of the "determination of effects" for Region 5 Sensitive plant species known to occur with the IRAs for the FSEIS.

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area

Scientific Name	Occurrence Information	Determinations for Alternatives 2, 2a, and 3
Acanthoscyphus parishi var. *abramsii*	Sespe – Frazier (LPNF)	NI/BI
Allium howellii var. clokeyi	Sespe – Frazier (LPNF)	NI/BI
Arctostaphylos pilosula	Black Mountain (LPNF), Machesna Mountain (LPNF)	NI/BI
Arctostaphylos refugioensis	Tequepis (LPNF)	NI/BI
Arenaria lanuginosa ssp. saxosa	Raywood Flat B (SBNF)	NI/BI
Astragalus bicristatus	Cactus Springs B (SBNF)	NI/BI
Astragalus deanei	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River New, Upper San Diego River (CNF)	MAI
Astragalus oocarpus	Barker Valley, Eagle Peak (CNF)	NI/BI
Boechera johnstonii	Pyramid Peak A (SBNF)	NI/BI
Botrychium crenulatum	Raywood Flat B (SBNF)	NI/BI
Brodiaea orcuttii	Barker Valley, Sill Hill (CNF)	NI/BI
Calochortus clavatus ssp. *gracilis*	Fish Canyon (ANF), Red Mountain (ANF), Salt Creek (ANF), Sespe-Frazier (ANF), Tule (ANF)	NI/BI
Calochortus dunnii	Sill Hill (CNF)	NI/BI
Calochortus palmeri var. *munzii*	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Calochortus palmeri var. palmeri	Garcia Mountain (LPNF), Machesna Mountain (LPNF), Sespe – Frazier (LPNF)	NI/BI
Calochortus plummerae	Raywood Flat B (SBNF), West Fork (ANF), Westfork (ANF)	NI/BI
Calochortus simulans	Garcia Mountain (LPNF), Machesna Mountain (LPNF), Spoor Canyon (LPNF)	NI/BI
Calochortus weedii var. intermedius	Coldwater, Ladd (CNF)	NI/BI

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area		
Scientific Name	**Occurrence Information**	**Determinations for Alternatives 2, 2a, and 3**
Calochortus weedii var. vestus	Dry Lakes (LPNF), Sespe – Frazier (LPNF), Tequepis (LPNF), White Ledge (LPNF)	NI/BI
Calycadenia villosa	Black Mountain (LPNF)	NI/BI
Castilleja gleasonii	Fish Creek (ANF)	NI/BI
Castilleja lasiorhyncha	Raywood Flat B (SBNF)	NI/BI
Caulanthus simulans	Barker Valley (CNF),	NI/BI
Chorizanthe blakleyi	Fox Mountain (LPNF), Spoor Canyon (LPNF)	NI/BI
Chorizanthe parryi var. *parryi*	Coldwater (CNF)	NI/BI
Chorizanthe polygonoides var. *longispina*	Barker Valley (CNF)	NI/BI
Chorizanthe rectispina	Black Mountain (LPNF)	NI/BI
Clarkia delicata	Cedar Creek, Eagle Peak, No Name, Sill Hill, Upper San Diego River New, Upper San Diego River (CNF)	NI/BI
Delphinium hesperium ssp. cuyamacae	Sill Hill (CNF)	NI/BI
Delphinium umbraulorum	Diablo (LPNF), Fox Mountain (LPNF), Garcia Mountain (LPNF), Machesna Mountain (LPNF), Sespe – Frazier (LPNF), Spoor Canyon (LPNF), Tequepis (LPNF), White Ledge (LPNF)	NI/BI
Dieteria canescens var. *ziegleri*	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Draba corrugata var. *saxosa*	Cactus Springs B (SBNF)	NI/BI
Dudleya viscida	Trabuco (CNF)	NI/BI
Eriastrum luteum	Black Mountain (LPNF)	NI/BI
Eriophyllum lanatum var. *hallii*	Fox Mountain (LPNF)	NI/BI
Fritillaria ojaiensis	Sespe – Frazier (LPNF), Tequepis (LPNF), White Ledge (LPNF)	NI/BI
Galium angustifolium ssp. *jacinticum*	Cactus Springs B (SBNF)	NI/BI
Gilia leptantha ssp. *Leptantha*	Raywood Flat B (SBNF)	NI/BI
Hesperocyparis stephensonii	Sill Hill (CNF), Upper San Diego River (CNF)	NI/BI
Heuchera hirsutissima	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Heuchera parishi	Raywood Flat B (SBNF)	NI/BI
Horkelia cuneata ssp. *puberula*	Trabuco (CNF)	NI/BI
Horkelia truncata	Ladd (CNF)	NI/BI
Imperata brevifolia	Antimony (LPNF), Dry Lakes (LPNF), West	NI/BI

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area		
Scientific Name	**Occurrence Information**	**Determinations for Alternatives 2, 2a, and 3**
	Fork (ANF), Westfork (ANF)	
Layia heterotricha	Antimony (LPNF), Fox Mountain (LPNF), Quatal (LPNF), Sespe – Frazier (LPNF)	NI/BI
Lepechinia cardiophylla	Coldwater (CNF), Ladd (CNF), Trabuco (CNF)	NI/BI
Lepechinia fragrans	West Fork (ANF), Westfork (ANF)	NI/BI
Lilium parryi	Cactus Springs B (SBNF), Cactus Springs B New (SBNF), Raywood Flat B (SBNF), West Fork (ANF),	NI/BI
Limnanthes alba var. *parishi*	Barker Valley (CNF)	NI/BI
Linanthus orcutti	Caliente (CNF)	NI/BI
Malacothrix saxatilis var. arachnoidea	Mudulce (LPNF)	NI/BI
Monardella linoides ssp. *oblonga*	Sespe – Frazier (LPNF)	NI/BI
Monardella macrantha ssp. *hallii*	Barker Valley (CNF), Caliente (CNF), Coldwater (CNF)	NI/BI
Monardella nana ssp.leptosiphon	Barker Valley (CNF)	NI/BI
Navarretia peninsularis	Sawmill – Badlands (LPNF), Sespe – Frazier (LPNF)	NI/BI
Nolina cistmontana	Trabuco (CNF)	NI/BI
Opuntia basiliaris ssp. *brachyclada*	Fish Canyon (ANF), Red Mountain (ANF), Sespe-Frazier (ANF), Tule (ANF)	NI/BI
Parnassia cirrata var. cirrata	Raywood Flat B (SBNF)	NI/BI
Penstemon californicus	Pyramid Peak A (SBNF)	NI/BI
Phacelia excilis	Sespe – Frazier (LPNF)	NI/BI
Phacelia keckii	Coldwater (CNF), Ladd (CNF), Trabuco (CNF)	NI/BI
Saltugilia latimeri	Cactus Springs B (SBNF)	NI/BI
Satureja chandleri	Trabuco (CNF)	NI/BI
Sedum niveum	Cactus Springs B (SBNF)	NI/BI
Sidalcea hickmanii ssp. parishi	Fox Mountain (LPNF), Machesna Mountain (LPNF), Spoor Canyon (LPNF), Raywood Flat B (SBNF)	NI/BI
Sidotheca emarginata	Cactus Springs B (SBNF), Cactus Springs B New (SBNF)	NI/BI
Streptanthus bernardinus	Cucamonga B (SBNF)	NI/BI
Streptanthus campestris	White Ledge (LPNF), Cactus Springs B (SBNF)	NI/BI
Symphyotrichum defoliatum	Cedar Creek, Eagle Peak, No Name, Sill Hill,	NI/BI

Table 1. Summary of "determination of effects" for Region 5 Sensitive Plant Species Known to Occur Within the Analysis Area		
Scientific Name	**Occurrence Information**	**Determinations for Alternatives 2, 2a, and 3**
	Upper San Diego River New, Upper San Diego River (CNF)	
Tetracoccus dioicus	Trabuco (CNF)	NI/BI
Thermoposis californica var. *semota*	Sill Hill (CNF), Upper San Diego River (CNF)	NI/BI
Thermopsis macrophylla	Tequepis (LPNF)	NI/BI

*Sensitive list includes those species managed as Sensitive prior to the June 30, 2013 Sensitive List

**Determination Codes:
MAI = may affect individuals but not likely to lead to a trend to Federal listing for Sensitive species.
NI/BI=No impact and potentially beneficial impact

H. Determination of Effects for Sensitive Plants by Alternative

Alternative 1 - No Action
Alternative 1 is continued implementation of the LMP, the viability assessments and determinations of effects would not change from those made in the supporting biological documents for the selected alternative in the FEIS. The supporting documents in that Project Record are incorporated here by reference.

Alternative 2 - Proposed Action
With the exception of one species, Alternative 2 would not impact any of the sensitive plant species discussed. The effects of Alternative 2 are expected to be beneficial for sensitive plants.

Astragalus deanei is the exception. The 14.74 acres zoned as BCNM in Alternative 1 (No Action) would be rezoned to BCMUR in Alternative 2. It was determined the effect of rezoning non-motorized habitat to motorized use restricted habitat would not result in "no impact." Nor would it result in a beneficial effect. Therefore the effects determination for *Astragalus deanei* in alternative 2 is "may affect individuals but not likely to lead in a trend towards federal listing." The rational as to why this determination is not expected to lead in a trend towards federal listing is described above in this Addendum.

Alternative 2a - Preferred Alternative
With the exception of one species, Alternative 2a would not impact any of the sensitive plant species discussed. The effects of Alternative 2a are expected to be beneficial for sensitive plants. Alternative 2a is expected to provide a greater beneficial effect due to the small increase of RW acreage over Alternative 2.

Astragalus deanei is the exception. The 14.74 acres zoned as BCNM in Alternative 1 (No Action) would be rezoned to BCMUR in Alternative 2a. It was determined the effect of rezoning non-motorized habitat to motorized use restricted habitat would not result in "no impact." Nor would it result in a beneficial effect. Therefore the effects determination for *Astragalus deanei* in alternatives 2a is "may affect individuals but not likely to lead in a trend towards federal listing." The rational as to why this determination is not expected to lead in a trend towards federal listing is described above in this Addendum.

Alternative 3 - Recommended Wilderness Emphasis
With the exception of one species, Alternative 3 would not impact any of the sensitive plant species discussed. The effects of Alternative 3 are expected to be beneficial for sensitive plants. Alternative 3 is expected to provide a greater beneficial effect due to the increased acreage of RW over Alternatives 2 and 2a.

Astragalus deanei is the exception. The 14.74 acres zoned as BCNM in Alternative 1 (No Action) would be rezoned to BCMUR in Alternative 3. It was determined the effect of rezoning non-motorized habitat to motorized use restricted habitat would not result in "no impact." Nor would it result in a beneficial effect. Therefore the effects determination for *Astragalus deanei* in alternative 3 is: "may affect individuals but will not lead in a trend towards federal listing." The rational as to why this determination is not expected to lead towards a trend towards federal listing is described above in this Addendum.

I. Determination of Effects for Sensitive Species not known to occur within the IRAs
Sensitive species displayed in **Table 5** of this Addendum that are not known to occur within the IRAs are not affected by the proposed action. There are no effects to those species.

J. Viability Determination for all botanical species
None of the alternatives, including the No Action, would be expected to result in loss of viability across the range of any native plant species in any of the IRAs.

K. Determination of effects for Sensitive species, other rare species, General Botanical Resources and Non-Native Species Management from Alternatives A and B (Monitoring Alternatives)
Changing the monitoring methodology, in itself, is not expected to result in effects to botanical resources or non-native species management. No effects to these species would occur.

L. Risk Assessment summary for the management of non-native plants and animals known to occur within the IRAs
The management of non-native plants and animals (e.g. survey, mapping, control and eradication) is not expected to be negatively affected by changes in land use zones. Alternatives 2 and 2a may result in lowered risk and Alternative 3 may result in the lowest risk of introduction, establishment and spread of non-native species.

M. Maps of locations of Sensitive plant species known to occur within the IRAs
Appendix B pages 3-8 in the February 2013 Botany Report include maps of those IRAs with known Sensitive Plant species occurrences. Locations of *Symphyotrichum defoliatum* were

acquired using geographical coordinates from the Consortium of California Herbaria and are not included in a map packet.

N. Plant Species Accounts

The 2006 species accounts created for the LMP revision were used and cited in the reports. Those accounts are available on the public website for this project and can be accessed at http://www.fs.fed.us/nepa/nepa_project_exp.php?project=35130
In addition, data from the updated plant species accounts were used as much as possible in the February 2013 Biological Evaluation and this Addendum. These accounts are included in the project record.

O. Updates to the References Section of the February 2013 Botanical Reports and those used in this Addendum

The following references were utilized in this Addendum.

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Winter, Kirsten. 2013. Personal communication with Deveree Kopp, botanist on the San Bernardino regarding *Astragalus deanei* occupied habitat on the CNF in Upper San Diego River IRA. On file San Bernardino National Forest, Big Bear Ranger Station, Resources office.